Independent Evaluation of the

New Jersey

Comprehensive Tobacco Control Program

Key Outcome Indicators

October 2005

Jon S. Corzine, Governor
Fred M. Jacobs, M.D., J.D., Commissioner

Acknowledgements

The New Jersey Comprehensive Tobacco Control Program (CTCP) is operated by the New Jersey Department of Health and Senior Services (DHSS) under the direction of Commissioner Fred M. Jacobs, M.D., J.D. The CTCP is administratively located within the Office of the State Epidemiologist. This report was prepared for DHSS by the University of Medicine and Dentistry of New Jersey-School of Public Health through funding from New Jersey's cigarette excise tax. The interpretations of data, conclusions and recommendations expressed in this report are those of the authors and may or may not represent the views of DHSS.

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1. HISTORICAL OVERVIEW

Since the early 1970's New Jersey has been a leader in tobacco control, with the advent of public health advocacy groups and the state government beginning to take a proactive role in protecting the health of its citizens. In 1976, the Shrimp vs. New Jersey Bell Telephone Company case increased public awareness of the dangers of secondhand smoke and set the bar for other New Jersey employers to provide smoke-free work areas after courts ruled that a company employee had a right to a safe workplace (NJDHSS, 2000). Shortly after this ruling, New Jersey began calling for restrictions on smoking in public places and tobacco control began.

By the mid 1990's, tobacco control activities at the state level had blossomed due to the urging of advocacy groups such as the American Cancer Society, American Lung Association, the Medical Society of New Jersey, and the New Jersey Group Against Smoking Pollution (NJGASP). In 1996, the Tobacco Age of Sale Enforcement (TASE) legislation was passed, which mandated that enforcement responsibility for minor tobacco sales be given to the Department of Health and Senior Services. Prior to the development of TASE, vendors often sold tobacco products to minors in direct violation with existing State laws. The main goal of TASE was to restrict youth access to tobacco products and to reduce the State noncompliance rate, then at 44%, to levels required by federal law.

In 1998, New Jersey saw its first increase in the cigarette excise tax in nearly a decade when the tax on a pack of cigarettes doubled from $0.40 to $0.80 on January 1. Later that same year, New Jersey found itself part of a landmark legal settlement with the tobacco industry. The Master Settlement Agreement (MSA) was a legal settlement between 46 states, the District of Columbia, five commonwealths and territories, and the tobacco industry signed on November 23, 1998. In the settlement, the tobacco companies agreed to pay $246 billion dollars over the next 25 years to compensate the states for the health costs attributed to tobacco use. New Jersey entered into the MSA in 1998 with the understanding that it would create funds for tobacco control programs to help prevent youth smoking initiation and provide support for current smokers to quit.

From the MSA, the New Jersey Department of Health and Senior Services (NJDHSS) received $18.6 million in January 2000 to start the Comprehensive Tobacco Control Program (CTCP) for New Jersey. The CTCP was designed to influence social norms regarding tobacco use and make tobacco use less acceptable, desirable and accessible. Activities were and are designed to support the goals of the CTCP including:

1. Decrease the acceptability of tobacco use among all populations
2. Decrease the number of youth under 18 years and young adults 18-24 years of age who start smoking
3. Increase the number of people who start and complete treatment for tobacco dependence
4. Decrease involuntary exposure to second hand smoke (both legally and socially)
5. Reduce tobacco use among different population groups

Since its inception in 2000, the CTCP has implemented a full range of statewide and local initiatives to reduce tobacco use (see Figure 1.1). With the initial funding, the CTCP quickly

created numerous tobacco control activities including Communities Against Tobacco (CAT) coalitions located throughout all 21 counties in New Jersey working to change the population's attitudes towards tobacco use, a web-based smoking treatment service known as New Jersey Quitnet, toll-free telephone counseling through the New Jersey Quitline, and several New Jersey Quitcenters that offer face-to-face counseling and treatment for smokers.

In addition, the statewide youth-led anti-tobacco movement known as REBEL, or Reaching Everyone By Exposing Lies, was launched in November 2000. By the end of 2003, there were over 2,000 active teenage members of REBEL participating in chapter meetings and activities as well as statewide events. The anti-tobacco movement was expanded in January 2002 to include middle school-based chapters of REBEL 2 for students in grades 6 to 8. REBEL Official College Staff (ROCS) were also created in 2002. Since 2001, CTCP has also worked with the American Lung Association (ALA) to provide cessation programs for youth in several schools throughout the State, using the ALA's N-O-T (Not On Tobacco) Program. The CTCP has also supported training for high school staff to create and conduct a curriculum-based tobacco cessation program called Youth Quit 2 Win, which was established in January 2005. And for several years DHSS funded a youth anti-tobacco media campaign named "Not For Sale" advertised on radio, television, and billboards.

Despite times of fiscal hardship for the State and subsequent reductions in program funding, the CTCP has survived and maintained several key initiatives including the community coalitions, Quit services, and REBEL, as described above. As of June 30, 2003, all future MSA payments to the State were sold to receive an upfront payment used to address budget shortfalls. Beginning July 1, 2003, funding for the CTCP was provided by monies collected through the cigarette excise tax.

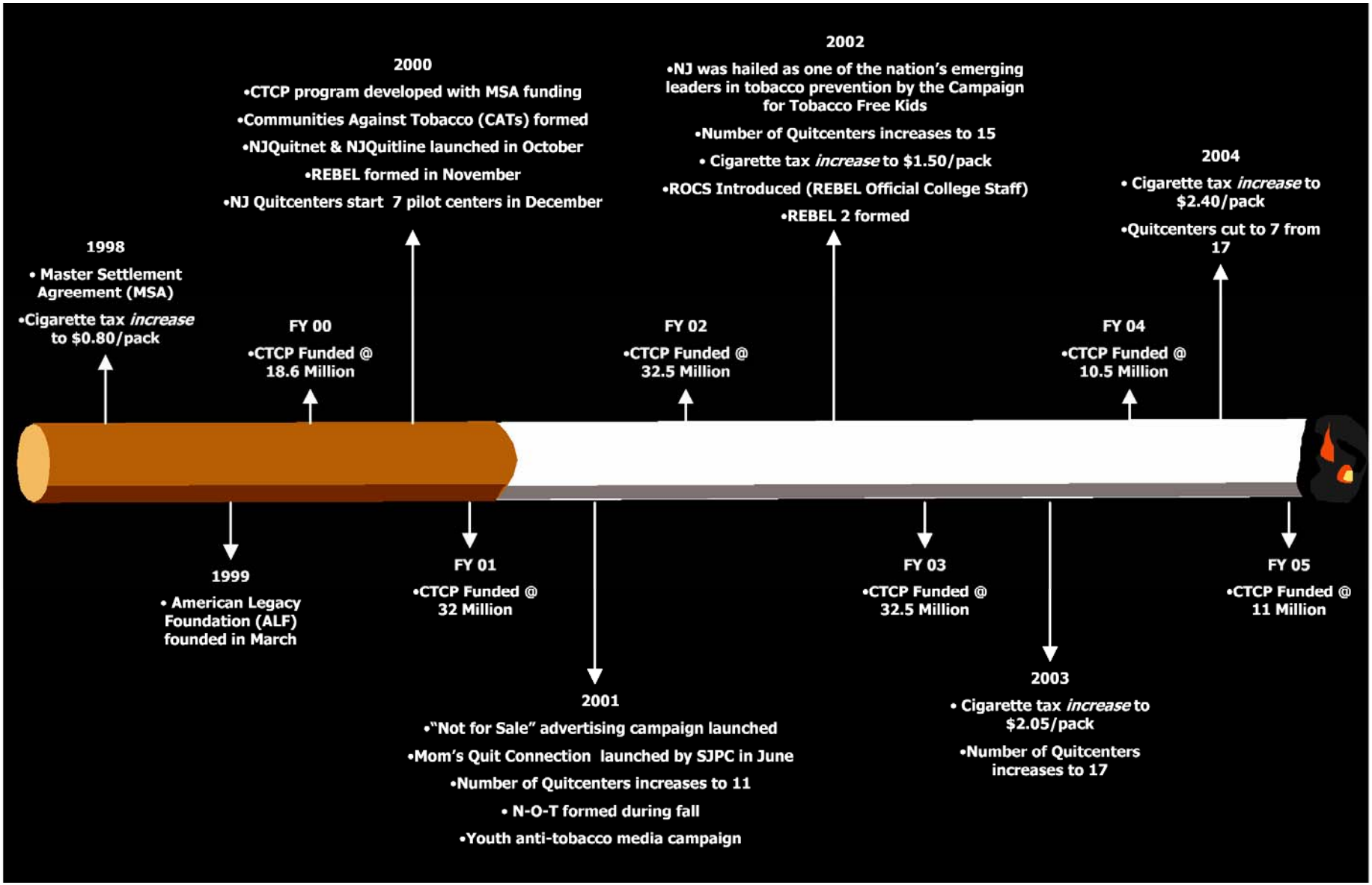
For several years now, New Jersey has had one of the highest cigarette excise taxes. On July 1, 2002, New Jersey implemented a 70-cent increase in its cigarette excise tax, giving the state the highest cigarette tax in the nation, tied with New York at $1.50. The State raised its cigarette excise tax again to $2.05 in July 2003 and to $2.40 in July 2004. New Jersey is currently one of only five states with a cigarette excise tax of $2 or more. For this reason and its sustained commitment to tobacco control, New Jersey has been hailed as one of the nation's leaders in tobacco prevention (CTFK, 2002).

Emerging Issues

The content of this report was prepared prior to the signing of two important bills in New Jersey. On January 15, 2006, Governor Richard J. Codey signed the New Jersey Smoke-Free Air Act into law. The Smoke-Free Air Act requires indoor public places and workplaces, including restaurants and bars, to be smoke-free, with the exception of cigar bars or lounges, tobacco retail establishments and the gaming areas of casinos. The law, which went into effect on April 15, 2006, carries penalties of $250 for a first-offense smoking violation; $500 for a second offense and $1,000 for each subsequent offense.

On this date, Governor Codey also signed bill S2783 into law, raising the legal age to purchase tobacco in New Jersey from 18- to 19-years old. This law also went into effect on April 15, 2006.

FIGURE 1.1: HISTORICAL TIMELINE OF CTCP, 2000-2005



2. CTCP ACTIVITIES

Community Partnerships

Community partnerships are a foundation of the CTCP. Working together, NJDHSS and CTCP community partners serve all populations in the state: young and expectant mothers, children and teens, multicultural groups, college students, the workforce, smokers and nonsmokers, people with tobacco related illnesses, and entire communities. New Jersey Breathes, NJ GASP, Communities Against Tobacco Coalitions (CATs), the New Jersey Perinatal Cooperative and the New Jersey Prevention Network are among the community partners that engage with CTCP to serve the residents of New Jersey.

The basic infrastructure of the community program is formed by the 21 community-based CAT (Communities Against Tobacco) coalitions, each serving one of New Jersey's 21 counties. The New Jersey Prevention Network supervises and provides support for the coalitions that include health and human services agencies, companies and businesses, schools, church groups, elected officials, parents and youth groups. These coalitions bring tobacco control to the local level, coordinating the efforts of community-based leadership groups to develop and implement projects that promote tobacco control advocacy, education and awareness.

The community partnership component of CTCP also provides support to other CTCP projects including the Tobacco Age of Sale Program (TASE). Communities Against Tobacco provide merchant education and information about the age of sale to minors in their communities in support of TASE.

Youth Anti-Tobacco

The REBEL (Reaching Everyone by Exposing Lies) movement is a movement by and for New Jersey high school students determined to break free from the influence of Big Tobacco. The REBEL program trains its members to mentor younger students and to serve as role models. This high school anti-tobacco movement has established chapters in all 21 counties each with the support of a full time youth coordinator. The New Jersey Prevention Network (NJPN) provides the statewide infrastructure that supports this system. The community based REBEL program is complemented by 77 high school chapters.

The success of REBEL has resulted in the development of REBEL 2 and ROCS (REBEL Official College Staff). REBEL 2 has expanded on the REBEL model to involve middle school children. With guidance from teachers, 6th through 8th graders develop school-based chapters with after-school activities focused on tobacco use prevention, decision making skills and peer leadership activities. ROCS, a group of specially trained college-age adults, mentor REBEL students by helping to plan community projects and recruitment activities, direct the Annual Statewide Summit, and serve as role models for health, tobacco-free lifestyles. REBEL U members promote smoke free campus environments and smoking cessation services for their peers who want to quit smoking. REBEL currently has approximately 1,700 active students and 12,000 advocates.

Not-On-Tobacco (N-O-T) is a program by the American Lung Association and West Virginia University focused on youth smoking cessation. A spring 2004 evaluation of 18 N-O-T schools showed a self reported quit rate of 19.9% and a biochemically validated quit rate of 15.5% among the 216 program participants.

Treatment

New Jersey Quitnet, Quitline and Quitcenters are three unique resources that provide free or low-cost treatment options to smokers. NJ Quitline is a toll-free telephone based counseling service offering brief advice or extensive, free, one-on-one telephone counseling. Counselors trained by the Mayo Clinic are available six days a week to provide individualized treatment plans, multiple counseling sessions, encouragement and support. As of December 2004, 6,692 individuals have enrolled with NJ Quitline.

NJ Quitnet is a free Web-based resource that offers a wide variety of online support to help smokers quit. This service is flexible, anonymous and available 24 hours a day, 7 days a week. As of December 2004, 31,220 individuals have registered with NJ Quitnet.

NJ Quitcenters provide comprehensive, individual assessments in a face-to-face counseling environment. There are currently five Quitcenters located throughout the State (UMDNJ School of Public Health – Tobacco Dependence Program, UMDNJ Behavioral Health, St. Barnabas, Somerset Medical Center and Kennedy Memorial Hospital). The five existing Quitcenters saw 5,891 patients between 2001 and 2004.

The CTCP has also supported training for high school staff to create and conduct a curriculum-based tobacco cessation program called Youth Quit 2 Win. As of December 2004, 20 facilitators were trained to implement a Quit 2 Win program at their schools.

Enforcement

The Tobacco Age of Sale Enforcement (TASE) Program provides funds and technical assistance to Local Health Departments (LHDs) throughout the State to conduct random, unannounced compliance check inspections of licensed retail tobacco vendors. Youth between the ages of 14 and 17, accompanied by the inspectors, attempt to purchase tobacco products from the sites selected to be in the sample.

State Public Health Representatives conduct inspections following the same protocol as LHDs in jurisdictions where LHDs do not participate. This activity is mandated by the Synar legislation of the Public Health Service Act of 1992 which was created to reduce the sale and distribution of tobacco products to persons under the age of 18.

Notices from the Department of Treasury, Division of Revenue (tobacco retail licenser) were mailed to all tobacco retailers with their renewal application. This notice advised retailers that it is a violation of State law to sell tobacco products to persons under the age of 18 years and advised of potential penalties. During 2004, all merchants received quarterly postcards to remind them of their obligations to not sell tobacco products to minors. These quarterly mailings

reinforced the message that there is a continuing enforcement process throughout the year. Due to budget restrictions, these postcards will be sent twice in 2005.

After each Compliance Check Inspection by either a LHD or TASE inspector, a copy of the Notice of Inspection Results (NIR) is presented to the retailer and summarizes the outcome of the inspection. If the retailer passes the inspection the retailer is congratulated and provided with a certificate of commendation. If a retailer fails the inspection, the inspector informs the person in charge that a violation has occurred and that a summons will be issued. In both situations, education to the merchant is an ongoing process after the inspection and involves the provision of additional information including posters, flyers, and official signage, if needed.

TASE has successfully integrated with other CTCP components to partner on projects. The "Caring Merchants = Healthy Communities" project was implemented by the Communities Against Tobacco (CAT) coalitions in coordination with the TASE program. This program reached a total of 497 retailers in the 21 counties. Unannounced visits were performed by the CAT community teams who surveyed the merchants' compliance with the law. Information and merchant education was provided as well as certificate of recognition.

Marketing and Communications

Anti-tobacco promotion is an important component of the CTCP. CTCP has focused its media campaign to impact the social acceptability of tobacco use in New Jersey and counteract the marketing of tobacco companies. Youth prevention and cessation are two of the major focus areas of CTCP media efforts.

3. OUTCOME EVALUATION METHODOLOGY

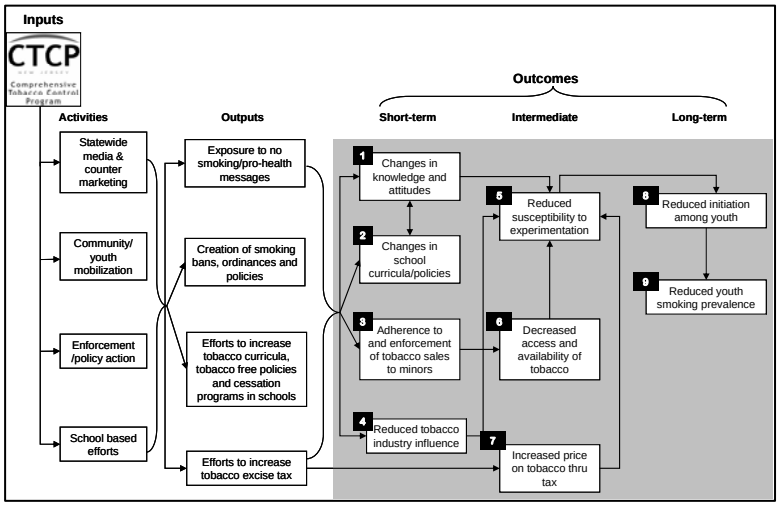
Overview

As detailed in previous evaluation reports, the methodology employed for the CTCP evaluation utilized a goal based evaluation model (McKenzie & Jurs, 1993). The evaluation plan focuses on the activities, outputs, and initial, intermediate, and long-term outcomes outlined in the State's program logic model, to direct measurement activities. Since its inception, the surveillance and evaluation activities employed by UMDNJ-School of Public Health have been consistent with the recommendations set forth in Centers for Disease Control and Prevention (CDC) *Best Practices for Comprehensive Tobacco Control Programs* and *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs* (CDC, 1999; MacDonald, et. al, 2001).

More recently, CDC developed "Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs" to facilitate the evaluation of state tobacco control programs. "Key Indicators" identifies relevant, evidence based short-term, intermediate, and long-term outcomes for statewide tobacco control programs. In addition, "Key Indicators" encourages program evaluators to employ standard questions and commonly used data sources. As such, the framework for this report is based on the CDC's "Key Indicators" and allows readers to easily assess the CTCP's progress toward these outcomes.

To better orient the readers of this document, a brief description of the "Key Indicators" approach follows. The approach relies on the use of logic models, which visually depict the presumed causal pathways that link program inputs and activities to outcomes. Outcomes are defined as short-term, intermediate and long-term. Figure 3.1 illustrates a logic model to reduce youth initiation of tobacco. For example, an increase in Tobacco Age of Sale (TASE) enforcement activities should result in increases in "adherence to and enforcement of tobacco sales to minors (SHORT TERM OUTCOME, Box 3), which in turn "decreases access and availability of tobacco" (INTERMEDIATE OUTCOME, Box 6), which links to "reduced susceptibility to experimentation" (INTERMEDIATE OUTCOME, Box 5), which links to "reduced initiation" (LONG TERM OUTCOME, Box 8) and "reduced youth smoking prevalence" (LONG TERM OUTCOME, Box 9).

Figure 3.1: Logic Model for Reducing Initiation of Tobacco Use Among Young People



Within each outcome are several indicators which can be utilized to assess the respective outcome. For example, "the proportion of jurisdictions with policies that control self-service tobacco sales" is one indicator that informs progress in "Adherence to and enforcement of tobacco sales to minors" (Box 3). Also, the use of multiple indicators to assess a single outcome capitalizes on the strengths inherent in each measure and minimizes the bias of any single measure, thereby increasing confidence in the findings and strengthening validity.

A number of studies, detailed below, were utilized to collect evaluation indicators. These include but are not limited to: the New Jersey Adult Tobacco Survey (NJATS), the New Jersey Youth Tobacco Survey (NJYTS), the New Jersey School Tobacco Policy Survey (NJSTPS), New Jersey Health Care Provider Survey (NJHCPS), and Media Tracking. Detailed methodologies for each specific data system are described below. Data from most surveys were analyzed with SUDAAN statistical software to correct for the complex sample design and generate 95% confidence intervals. Differences between estimates were considered statistically significant at the $p < 0.05$ level if the 95% confidence intervals did not overlap (RTI, 2001). Hypothesis testing based on a t-statistic was used to determine whether there was a statistically significant change in estimates between successive years.

New Jersey Adult Tobacco Survey (NJATS)

The New Jersey Adult Tobacco Survey (NJATS) is a point-in-time telephone survey used to monitor tobacco use behavior, knowledge, and attitudes among New Jersey adults. The survey uses a random digit dialing (RDD) sampling approach, and provides information that allows the CTCP to monitor progress over time and evaluate whether goals and objectives are being met, particularly those aimed at reducing the use of tobacco among New Jersey adults. The NJATS was administered in 2000, 2001, 2002, and 2005. The most recent NJATS was administered to 3062 adults between February and April 2005. The data are weighted to adjust for non-response and the varying probabilities of selection, including those resulting from the over sampling, providing results representative of the New Jersey adult population.

New Jersey Youth Tobacco Survey (NJYTS)

The New Jersey Youth Tobacco Survey (NJYTS) measures attitudes and behaviors related to tobacco use among middle and high school students. The NJYTS was first conducted in New Jersey in 1999 and was repeated in 2001. In 2004, a two-stage cluster sample design was utilized to assess statewide trends. The first stage sampling frame was constructed from all public, private, charter and vocational middle and high schools in New Jersey. Schools were selected with a probability proportional to size (PPS) without replacement for a total of 40 high schools and 40 middle schools. The second stage of sampling involved the random selection of approximately three classes within sampled schools. The 2004 NJYTS was administered to 4,577 middle and high school students in 76 schools during fall 2004 and these findings are representative of all 7th through 12th grade students in the State.

New Jersey School Tobacco Policy Survey (NJSTPS)

The purpose of the New Jersey School Tobacco Policy Survey (NJSTPS) is to evaluate the implementation of comprehensive school tobacco policies as well as other tobacco control initiatives in New Jersey high schools. During spring 2005, a paper and pencil survey was mailed to all public and private high schools with an enrollment of at least 100 students. The overall response rate was 93%. The results of the 2005 NJSTPS were compared to the 2002 School Tobacco Survey (STS), where appropriate. The 2002 STS was administered to middle and high schools in New Jersey.

New Jersey Health Care Provider Study (NJHCPS)

The New Jersey Health Care Provider Study (NJHCPS) obtains data on health care providers' practices for tobacco dependence treatment. The study targeted providers that treat three specific population groups: adolescents, adults, and pregnant women. The NJHCPS utilized a stratified random sample design to obtain a sufficient number of providers who serve adolescents, adults, and pregnant women including internists, general practitioners, family physicians, pediatricians, obstetricians/gynecologists, and certified nurse-midwives. In 2002, a paper and pencil survey was mailed to all eligible health care providers. An overall response rate of 66.4% among eligible health care providers was achieved, yielding a total of 1,241 participants. The data were weighted to adjust for non-response and the varying probabilities of selection, including those resulting from the over sampling, providing results representative of New Jersey primary care provider population.

Media Tracking

Adult-Related

Adult Tobacco Survey: Media and Marketing Questions

The NJATS asked questions that related to residents' general awareness of tobacco advertising and exposure to tobacco marketing and promotion, and about their awareness of specific state media campaigns designed to promote New Jersey's Quit services. For example, a general advertising exposure question asked, "In the last 6 months, have you received mail addressed to you from a tobacco company including coupons, magazines, or catalogs?". State media campaign questions asked about whether residents had seen or heard of any anti-tobacco advertisements, and then gauged whether they had specifically heard of CTCP's media messages.

Adult Media Tracking Survey

The New Jersey Media Tracking Survey (NJMTS) is a point-in-time telephone survey used to explore New Jersey adults' awareness of state anti-tobacco advertising and media campaigns. The survey uses a random digit dialing (RDD) sampling approach, and current smokers are over sampled. The 2003 NJMTS consisted of 1000 interviews conducted between March and April 2003.

Youth-Related

Youth Tobacco Survey: Media and Marketing Questions

Similarly to the ATS, the NJYTS asked students questions that related to their general awareness of tobacco advertising and their exposure to tobacco marketing and promotion, as well as their awareness of youth-targeted anti-tobacco media and state-sponsored media messages. For example, a question addressing the CTCP's media campaign asked, "During the past 30 days about how often have you seen or heard "Tell Big Tobacco, Not for Sale" messages on television, radio, billboards or buses?"

Adolescent Media Tracking Survey

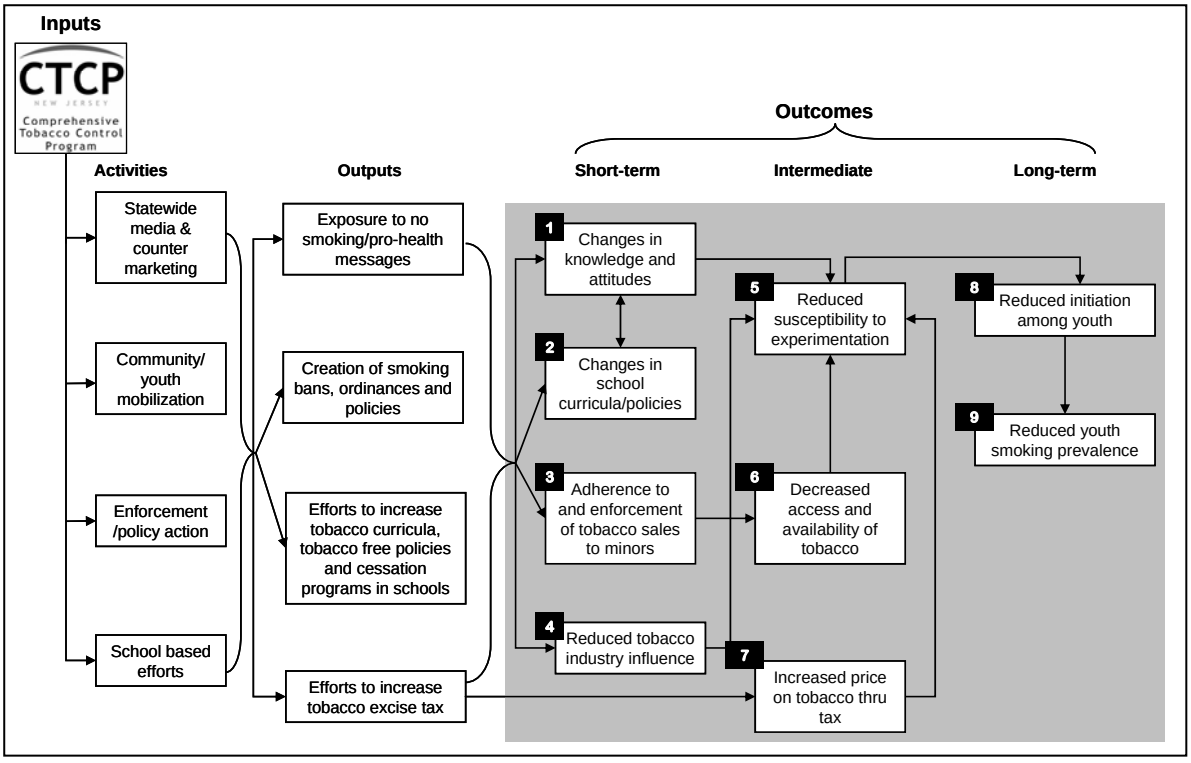
The New Jersey Adolescent Media Tracking Survey (NJAMTS) is a telephone survey of New Jersey 12-17 year olds used to explore young people's awareness of State anti-tobacco advertising and media campaigns and to explore awareness of and attitudes towards REBEL, New Jersey's anti-tobacco youth movement. The 2003 NJAMTS consisted of 580 interviews conducted between March and May 2003. Data were collected from 12 to 17 year old youth from a sample of telephone numbers from the 2002 New Jersey Adult Tobacco Survey (NJATS). The 2002 NJATS included a household screener that identified the number of adult household members and adolescents (aged 12 to 17) in the household. This survey utilized a two-stage verbal consent process, where consent was first obtained from the parent and then sought from the child. The response rate was 32%. Participants were evenly distributed by gender and age.

4. PREVENTING INITIATION OF TOBACCO USE AMONG YOUNG PEOPLE

The decline in youth smoking prevalence since the late 1990s was a public health success, reversing upward national trends seen in the early 1990s (Johnston, et al., 2003; Grunbaum, et al., 2002). However, recent data from the National Youth Tobacco Survey indicated no changes in cigarette smoking prevalence among middle or high school students between 2002 and 2004 (CDC, 2005b). Additionally, young adults (aged 18 to 24) have consistently had higher rates of cigarette smoking relative to older adults. Monitoring patterns of use in these two vulnerable populations is critical to evaluating progress towards preventing initiation and reducing overall smoking prevalence.

To assess progress toward this goal, we examined nine outcomes and their respective indicators in the logic model below (see Figure 4.1). These include, but are not limited to, lifetime use of tobacco products, current use of cigarettes, access to cigarettes, and participation in youth empowerment activities. Additional data on youth tobacco use in New Jersey can be found in 2004 New Jersey Youth Tobacco Survey: A Statewide Report.

Figure 4.1: Logic Model for Reducing Initiation of Tobacco Use Among Young People



Short-Term Outcomes

Outcome 1. Increased knowledge of, improved anti-tobacco attitudes toward, and increased support for policies to reduce youth initiation

As indicated in the logic model, factors that discourage initiation of tobacco among young people include increased knowledge of the dangers of tobacco use, increased negative attitudes toward tobacco use, and increased public support for effective tobacco control policies. Four indicators associated with these short-term outcomes are assessed below.

Indicator 1.a Level of confirmed awareness of anti-tobacco media messages

Conducted in spring 2003, the NJ Adolescent Media Tracking Study (NJAMTS) collected data on awareness of anti-tobacco advertising and activities among 12 to 17 year olds. About one quarter of participants reported having seen each of the two "Not for Sale" REBEL commercial television ads - 25.7% for "I Did It" and 24.7% for "Just Try It." Confirmed awareness of these ads was also measured by asking the respondent to describe something that happened in the ad and those who answered accurately were considered to have "confirmed awareness." Confirmed awareness for the two REBEL ads was lower, with 18% of participants confirming awareness of "I Did It", and 10% confirming awareness of "Just Try It." It should be noted that the CTCP has not run anti-tobacco television advertisements targeted to youth since 2004.

In terms of other media, 27% of New Jersey teens were aware of "First Time," a radio ad, and 42.2% were aware of at least one billboard with a CTCP campaign slogan. In comparison, 13.3% of New Jersey teens reported awareness of a billboard with the fake slogan ("It's Not As Bad As They Say"), suggesting that actual awareness of radio and billboard ads are likely overstated. Additionally, one fifth (21.7%) of New Jersey teens reported having Channel One in their schools and 55.2% of these teens with Channel One recalled seeing REBEL advertisements. Of all NJAMTS respondents, approximately 10% recalled seeing a REBEL spot on Channel One.

Indicator 1.b Level of receptivity to anti-tobacco media messages

The NJAMTS also asked respondents who were able to confirm awareness about the effectiveness of the anti-tobacco ads discussed above. Among respondents who were able to confirm awareness, over 85% of teens felt that the two "Not for Sale" ads ("I Did It" and "Just Try It") were convincing and over 80% (82% and 86% for the two ads, respectively) felt that they gave good reasons not to smoke.

Indicator 1.c Proportion of students who would ever wear or use something with a tobacco company name or picture

In 1999, 29.6% (±2.0) of middle school students and 40.9% (±2.1) of high school students indicated a willingness to wear or use something with a tobacco company name or picture. Based on the 2004 NJYTS, 20.4% (±2.5) of middle school students and 33.9% (±2.2) of high school students indicated that they would ever wear or use something with a tobacco company name or picture, representing a significant decline between 1999 and 2004. In both middle and high

school, male students (24.7 ±2.9% in middle school, 40.9 ±3.2% in high school) were significantly more likely than female students (15.8 ±2.9% in middle school, 26.7 ±3.1% in high school) to be willing to wear or use something by a tobacco company. There were no significant racial differences among middle school students. In high school, a significantly higher proportion of white students (36.5 ±2.5%) reported they would wear or use something by a tobacco company compared to black students (26.3 ±5.1%).

Indicator 1.d Proportion of young people who think that the cigarette companies try to get young people to smoke

In 2004, 89.9% (±1.9) of middle school and 88.1% (±1.6) of high school students indicated that they thought tobacco companies try to get young people to start smoking by using advertisements that are attractive to young people. There were no differences by gender among middle school students but among high school students, female students (91.1 ±1.7%) were more likely than male students (85.1 ±2.0%) to believe that cigarette companies try to get young people to start smoking. Among middle school students, the proportion of white students (92.8 ±1.3%) who thought that cigarette companies try to get young people to smoke was significantly higher compared to black (85.4 ±5.3%) or Hispanic (84.3 ±3.9%) middle school students. High school students did not differ on this indicator by race/ethnicity.

While there has been little change among middle school students, the proportion of high school students who agreed that cigarette companies try to get young people to smoke significantly increased from 1999 to 2004. In 1999, 88.0% (±1.5) of middle school and 83.2% (±1.4) of high school students agreed with this statement.

Outcome 2. Increased anti-tobacco policies and programs in schools

CDC recommends the implementation of school-based interventions, such as 100% tobacco-free policies and tobacco prevention and cessation programs. As such, we assessed five indicators to evaluate school-based anti-tobacco policies and programs in New Jersey including the proportion of schools with 100% tobacco-free policies, the proportion of schools that actively address tobacco prevention and cessation, awareness and participation in tobacco use prevention activities, perceived compliance with policies, and regulation of the display of tobacco industry promotional items.

Indicator 2.a Proportion of schools reporting the implementation of 100% tobacco-free policies

Based on the 2005 New Jersey School Tobacco Policy Survey (NJSTPS), almost all high schools (98.9%) in New Jersey reported having a policy that prohibits the use of cigarettes by students at school. Roughly nine out of ten prohibited cigarette smoking by faculty (92.2%) and visitors (92.4%). However, a 100% tobacco-free policy is defined as a policy that prohibits the use of *all tobacco* products *by everyone* (i.e., students, faculty and visitors), *in all locations* (i.e., indoors, on school grounds, in school vehicles, and at school sponsored events), 24 hours a day. Less than half of the high schools (47.3%) were categorized as having a 100% tobacco-free policy, representing a slight increase from 2002 when 42.2% of high schools reported a 100% tobacco-

free policy. The results for this indicator also appear in Goal Area 2: Eliminating Nonsmokers' Exposure to Secondhand Smoke.

Indicator 2.b Proportion of schools actively addressing tobacco prevention and cessation among students and staff

The 2005 NJSTPS also asked high schools if they provided staff with program-specific training for tobacco prevention or control. Based on the survey, 81.7% of New Jersey high schools reported that staff received program-specific training. Moreover, 50.1% of New Jersey high schools involved parents or families in support of school-based programs that prevent or treat tobacco use. In addition, roughly a third of New Jersey high schools indicated that they provide referrals to tobacco cessation programs for faculty and staff (38.2%) and more than half indicated providing such referrals for students (60.8%). Based on the 2005 NJSTPS, 72.0% of New Jersey high schools indicated that they assessed their tobacco programs, including tobacco use policies, at regular intervals.

Indicator 2.c Proportion of students who are aware of and participate in tobacco use prevention activities

Survey questions were included in the 2004 NJYTS to collect data on awareness of CTCP youth empowerment activities (i.e., REBEL or REBEL 2). Overall, 24.0% (±8.0) of middle school and 38.6% (±9.3) of high school students had heard of the statewide youth-led anti-tobacco movement known as REBEL. There was no significant difference in awareness of REBEL between 2001 and 2004. Based on the 2004 NJYTS, among high school students, 5.1% (±1.4) reported being a member of a REBEL chapter and 9.8% (±3.2) reported ever participating in a REBEL event.

Based on the 2003 NJAMTS, roughly four out of ten New Jersey teens reported overall awareness of REBEL (44.4%). To measure potential interest in REBEL, respondents were asked if they would like to help REBEL get the word out. Roughly one-quarter of New Jersey teens (27.9%) strongly agreed and more than half (62.0%) agreed that they would like to help REBEL get the word out. One out of five (19.8%) respondents described REBEL as being about telling young people not to smoke and 8.5% said it was about fighting back against cigarette companies.

Indicator 2.d Perceived compliance with tobacco-free policies in schools

According to the 2004 NJYTS, 1.3% (±0.7) of middle school students and 7.4% (±1.8) of high school students reported smoking on school property in the last 30 days. Between 1999 and 2004, there was a significant decrease in the proportion of high school students who smoked on school property. Among high school students, smoking on school property decreased from 12.9% (±1.9) in 1999 to 7.4% (±1.8) in 2004. Among middle school students, there was no significant change in compliance between 1999 and 2004; in 1999, 2.5% (±0.6) reported smoking on school property and in 2004, 1.3% (±0.7) reported smoking. This indicator is also described in Goal Area 2: Eliminating Nonsmokers' Exposure to Secondhand Smoke.

Indicator 2.e Proportion of schools with policies that regulate display of tobacco industry promotional items

According to the 2005 NJSTPS, most New Jersey high schools (91.4%) reported that tobacco advertising was prohibited in all locations including in the school building, on school grounds, on school vehicles, and in school publications. Many high schools (91.1%) also banned tobacco advertising through sponsorship of school events. In addition, approximately two-thirds of New Jersey high schools (69.7%) indicated that students at their school were prohibited from wearing tobacco brand-name apparel or carrying merchandise with tobacco company names or pictures.

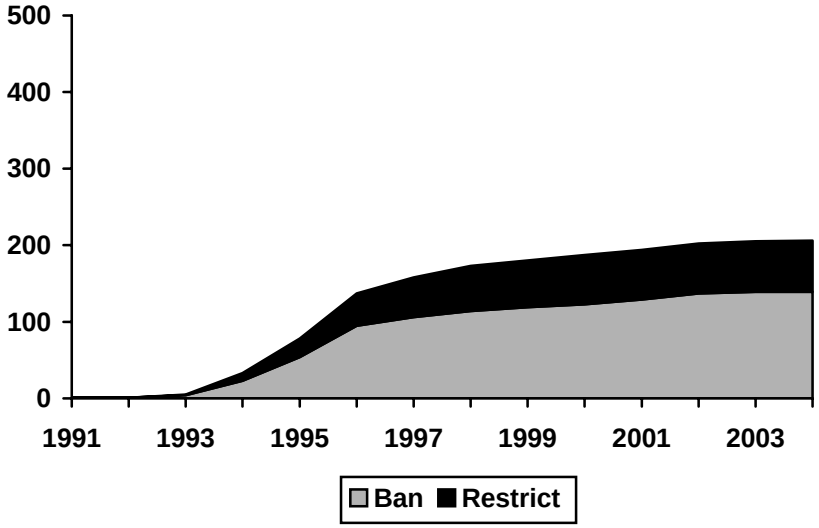
Outcome 3. Increased restriction and enforcement of tobacco sales to minors

Interventions to reduce minors' access to tobacco include regulating or altering retailer behavior. New Jersey is one of 39 states that require all tobacco retailers to obtain a license for over-the-counter tobacco sales. Other policies that restrict tobacco sales to minors must be assessed at the local level including the proportion of jurisdictions with policies that ban tobacco vending machine sales and the proportion that restrict self-service tobacco sales. An additional indicator to assess restriction and enforcement of tobacco sales to minors is the number of compliance checks conducted by enforcement agencies. These three indicators are summarized below.

Indicator 3.a Proportion of jurisdictions with policies that ban tobacco vending machine sales in places accessible to young people

The number of municipalities in New Jersey that ban or restrict tobacco vending machine sales has increased over the last ten years. However, out of 566 municipalities in New Jersey, less than half restrict or ban tobacco vending machine sales (see Figure 4.2). As of 2004, 139 New Jersey municipalities had ordinances banning the sale of tobacco in vending machines and 67 municipalities had restrictions on tobacco vending machines (including the location of machines).

Figure 4.2: Number of municipalities that ban or restrict tobacco vending machines – 1991-2004, Source: NJGASP



Indicator 3.b Proportion of jurisdictions with policies that control self-service tobacco sales

As of 2004, 97 New Jersey municipalities had ordinances that banned self-service tobacco sales. It should be noted, however, that many of these ordinances contain exemptions. For example, 11 of these ordinances ban the self-service display of cigarettes only, leaving other forms of tobacco easily accessible in the retail environment.

Indicator 3.c Number of compliance checks conducted by enforcement agencies

Between 2000 and 2005, a total of 5,871 compliance checks were conducted by local New Jersey enforcement agencies in order to assess the level of retailer compliance with laws restricting the sale of tobacco to minors. In 2005, more than 600 compliance checks were conducted, which is half as many as were conducted in 2000 when over 1,200 compliance checks were completed by enforcement agencies. Maintaining a consistently high number of compliance checks is important because it conveys the message to retailers and the public that enforcement agencies are serious about laws restricting youth access to tobacco. Achieving a high rate of retailer compliance will require strong education and enforcement efforts (Weber, Bugwell, Fielding & Glantz, 2003).

Outcome 4. Reduced tobacco industry influences

Preventing youth from using tobacco includes protecting them from the aggressive advertising and marketing tactics of the tobacco industry. Studies suggest that youth are particularly susceptible to tobacco advertising and for this reason, it is important to track tobacco advertising, promotions, and products that target youth. CDC recommends twelve key indicators for monitoring tobacco industry influences. However, in New Jersey, data are only available for three recommended indicators which are summarized below.

Indicator 4.a Proportion of jurisdictions with policies that regulate the extent and type of retail tobacco advertising and promotions

In New Jersey, only two municipalities, both in Gloucester County, currently have ordinances that restrict or regulate tobacco advertising. These ordinances are intended to restrict the placement of indoor tobacco advertising to above a child's eye level.

Indicator 4.b Proportion of jurisdictions with policies that regulate the extent of tobacco advertising outside of stores

Since 1997, five New Jersey municipalities have enacted policies to regulate outdoor tobacco advertising. Two of these municipalities ban tobacco advertising within 1000 feet of where children gather, two ban advertising within 500 feet of where children gather, and one bans advertising within 1000 feet of school property.

Indicator 4.c Presence of tobacco advertising near schools

On the 2005 NJSTPS, administrators were asked to indicate if there were tobacco advertisements in the area around the school (1,000 foot radius). In 2005, 15.4% of high schools reported the presence of tobacco advertising within 1,000 feet of the school. However, this measure does not assess the type or extent of tobacco advertising near schools.

Intermediate Outcomes

Outcome 5. Reduced susceptibility to experimentation with tobacco products

Susceptibility to smoking is defined as the intention to smoke or the absence of a strong intention not to smoke. Studies show that susceptibility to experimentation is a valid and reliable predictor of future smoking behavior (Pierce, 1996). Indicators to assess this outcome include the proportion of youth who think that smoking is cool, believe that young people who smoke have more friends, report that their parents have discussed not smoking with them, and are susceptible never-smokers. These four indicators are summarized below.

Indicator 5.a Proportion of young people who think that smoking is cool and helps them fit in

Social norms about tobacco use are likely to influence experimentation with tobacco. According to the 2004 NJYTS, 16.8% (±2.5) of middle school and 18.3% (±2.0) of high school students reported thinking that smoking is cool and helps them fit in. In both groups of students, smokers were twice as likely as nonsmokers to believe that smoking could improve their social standing. In middle school, black and Hispanic students (22.4 ±4.9%, 19.8 ±3.4%, respectively) were more likely to agree that smoking is cool and helps youth fit in but these racial differences did not exist in high school. There were no differences by gender among middle or high school students.

However, there is an overall downward trend in the proportion of students who believed that smoking was cool. In 1999, 19.5% (±1.6) of middle school and 22.0% (±1.5) of high school students thought that smoking was cool and helped them fit in.

Indicator 5.b Proportion of young people who think that young people who smoke have more friends

Another perceived social benefit to smoking is the belief that youth who smoke have more friends. In 2004, 18.3% (±3.8) of middle school and 20.6% (±2.7) of high school students believed that young people who smoked had more friends. Again, there were significant differences by smoking status, with smokers (50.2 ±11.0% in middle school, 31.9 ±5.0% in high school) significantly more likely than nonsmokers (16.1 ±3.3% in middle school, 17.8 ±2.6% in high school) to agree with this statement. Black and Hispanic high school students (30.3 ±5.0%, 28.8 ±5.0%, respectively) were significantly more likely than white high school students (15.8 ±2.4%) to think that young people who smoked had more friends. Attitudes did not differ by gender among either middle or high school students.

In 1999, 21.0% (±2.7) of middle school and 25.5% (±2.2) of high school students thought that young people who smoked had more friends, signifying some change in attitude among high school students over the last five years.

Indicator 5.c Proportion of young people who report that their parents have discussed not smoking with them

When asked how often parents have discussed the dangers of tobacco use in the last 12 months, only 15.9% (±2.6) of middle school and 10.4% (±1.4) of high school students indicated that their parents discussed the dangers of tobacco use with them often or very often. In fact, 31.7% (±1.9) of middle school and 44.0% (±2.4) of high school students indicated that their parents had never discussed the dangers of tobacco use with them in the last year. There were no differences by gender among middle or high school students. In middle school, Hispanic students (22.6 ±3.8%) were significantly more likely than white students (14.0 ±2.0%) to report having discussed tobacco use with their parents often or very often. There were no racial differences among high school students.

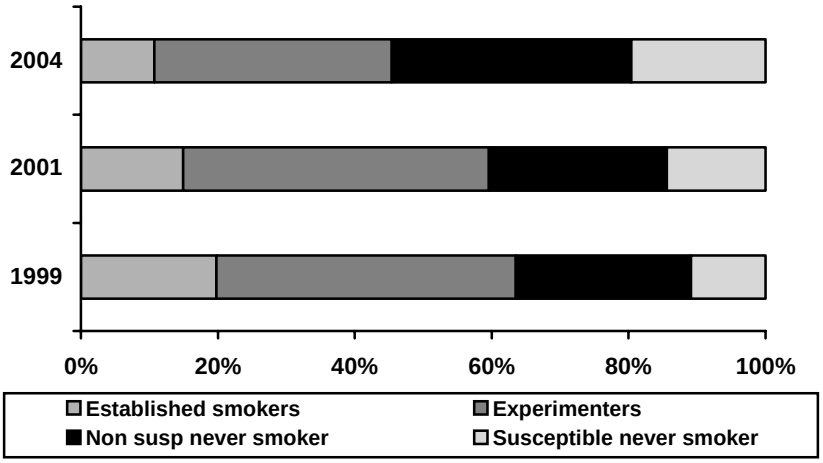
The proportion of young people who reported having discussions with their parents about tobacco use has remained unchanged since the last YTS. In 2001, 14.5% (±1.4) of middle school and 10.0% (±1.3) of high school students reported that their parents discussed the dangers of tobacco use with them often or very often during the previous year.

Indicator 5.d Proportion of young people who are susceptible never-smokers

Youth who have never tried a cigarette but have not made a firm decision not to smoke are classified as susceptible never-smokers. Based on the NJYTS, a susceptible never-smoker is a student who has never tried smoking, even one or two puffs and meets one of the following three criteria: 1) Responded ‘yes’ to the question “Do you think you will try a cigarette soon?” or 2) Responded ‘definitely yes’ or ‘probably yes’ or ‘probably not’ to the question “Do you think you will smoke a cigarette at any time during the next year?” or 3) Responded ‘definitely yes’ or ‘probably yes’ or ‘probably not’ to the question, “If one of your best friends offered you a cigarette, would you smoke it?”

As seen in Figure 4.3, the proportion of established smokers has significantly decreased but, the proportion of students classified as susceptible never-smokers has actually increased from 14.5% (±1.0) in 1999 to 16.6% (±2.3) in 2001 to 22.2% (±2.4) in 2004.

Figure 4.3: Percentage of high school students who are susceptible to smoking – NJYTS, 1999-2004



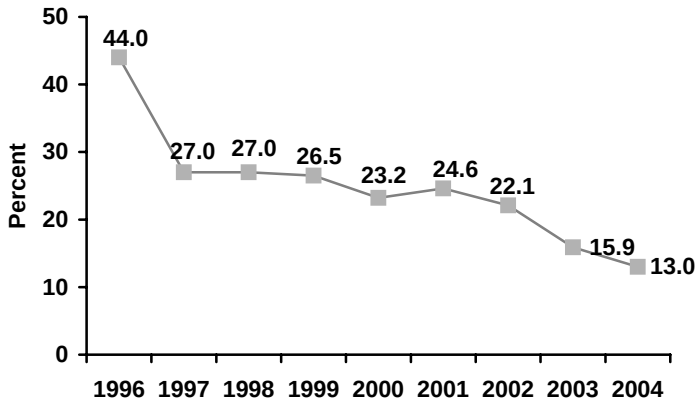
Outcome 6. Decreased access to tobacco products

Preventing youth from acquiring cigarettes can be a factor in preventing them from ever starting to smoke. As such, we assess several indicators of youth access to tobacco products including the proportion of successful attempts to purchase tobacco by youth, the proportion of youth reporting they had been sold tobacco by a retailer, the proportion not asked to show proof of age, and the proportion of youth receiving tobacco from a social source. These four indicators are summarized below.

Indicator 6.a Proportion of successful attempts to purchase tobacco products by young people

As of 2004, 13% of New Jersey's tobacco merchants were not in compliance with the Tobacco Age of Sale law based on the federal Synar amendment. Although this indicates an area where more effort is needed, New Jersey's Tobacco Age of Sale Enforcement (TASE) program has consistently improved compliance rates since it began in 1996 and the proportion of successful youth attempts to purchase tobacco has decreased, as shown in Figure 4.4.

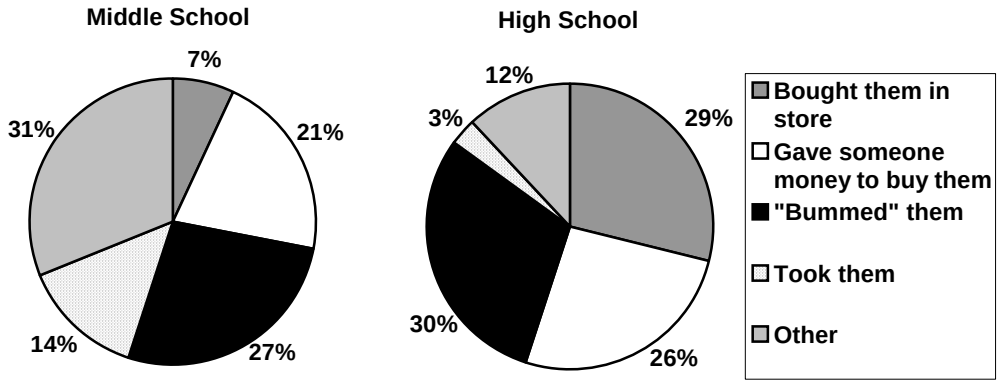
Figure 4.4: Proportion of successful youth attempts to purchase tobacco – 1996-2004, Source: SAMHSA Compliance Checks



Indicator 6.b Proportion of young people reporting that they have been sold tobacco products by a retailer

As shown in Figure 4.5, high school students (28.8 ±5.5%) were more likely than middle school students (7.2 ±3.7%) to report that they had usually got their cigarettes in last 30 days by purchasing them in a store. Among current smokers under the age of 18, the percent who reported usually obtaining their cigarettes by buying them in stores significantly decreased over the past five years (i.e., 1999 to 2004) from 14.2% (±4.3) to 7.2% (±3.7) among middle school students; it also decreased from 34.2% (±3.0) to 28.8% (±5.5) among high school students but this decline was not statistically significant.

Figure 4.5: How current cigarette smokers in middle school and high school (<18yrs.) usually obtained cigarettes – NJYTS, 2004



Indicator 6.c Proportion of young people reporting that they were not asked to show proof of age

Among current smokers in high school under the age of 18 who reported buying or trying to buy cigarettes in the 30 days preceding the survey, 57.7% (±5.5) reported they were not asked to show proof of age. This finding represents the first significant decrease since 1999 when 67.1% (±4.4) of current smokers in high school reported not being asked for proof of age. Nonetheless, more than half of high school-age smokers in 2004 reported they were not carded when they bought cigarettes.

Indicator 6.d Proportion of young people reporting that they have received tobacco products from a social source

As shown in Figure 4.5, borrowing or "bumming" a cigarette was the most frequent way of obtaining cigarettes for current smokers in middle school (27.4 ±11.1%) and high school (29.8 ±5.9%), followed by giving someone money to purchase them (21.2 ±8.8% among middle school students and 26.2 ±4.8% among high school students).

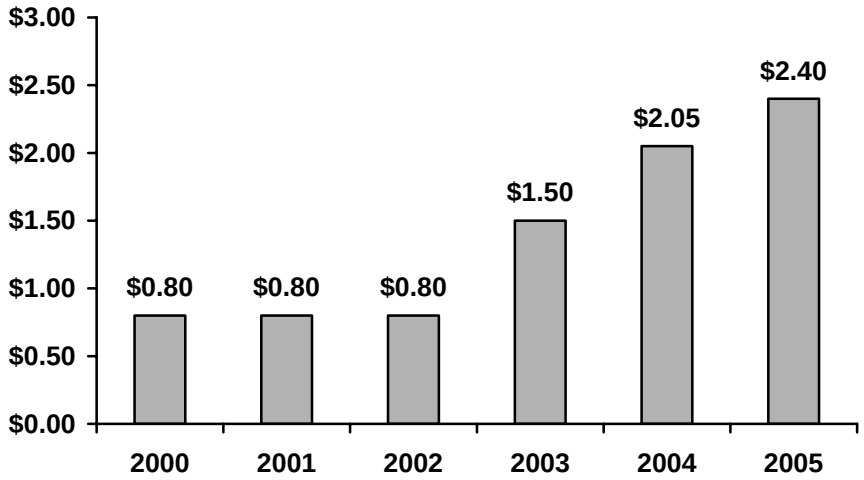
Outcome 7. Increased price of tobacco products

Research has documented that higher cigarette prices are associated with reduced smoking prevalence among youth and young adults (NCI, 2001). Increasing the state cigarette excise tax is an effective method of increasing the real price of cigarettes. As such, an important indicator to assess efforts to prevent youth initiation of tobacco is the amount of the tobacco product excise tax.

Indicator 7.a Amount of tobacco product excise tax

New Jersey has consistently had one of the highest cigarette excise taxes in the nation. For nearly a decade, the cigarette excise tax remained at 40 cents per pack until January 1, 1998 when the tax was raised to $0.80 per pack, making it the third highest cigarette excise tax at the time. On July 1, 2002, New Jersey implemented a 70-cent cigarette tax increase, giving the state the highest cigarette tax in the nation, tied with New York at $1.50 (see Figure 4.6). The state raised its cigarette excise tax again to $2.05 in July 2003, standing alone as the highest cigarette excise tax in the nation, with Rhode Island trailing behind at $1.71. As of January 2004, the average tax rate for a pack of cigarettes in non-tobacco producing states was $0.82, making New Jersey's cigarette excise tax rate of $2.05 at the time about 150% above the average. The cigarette tax was recently increased for the third time in as many years to $2.40 on July 1, 2004. As of September 2005, New Jersey is one of only five states with a cigarette excise tax of $2 or more.

Figure 4.6: New Jersey cigarette excise tax, 2000-2005



Long-Term Outcomes

Outcome 8. Reduced initiation of tobacco use by young people

Preventing initiation is critical to reducing smoking consumption and prevalence. Although preventing initiation is best, delaying the age of smoking onset can also affect smoking consumption and prevalence. The earlier youth begin smoking, the more cigarettes they are likely to smoke per day and the less likely they are to quit (UDHHS, 1994). Indicators to assess the reduced initiation of tobacco use among young people include the proportion who report having ever tried a cigarette and the average age at which youth first smoke a cigarette.

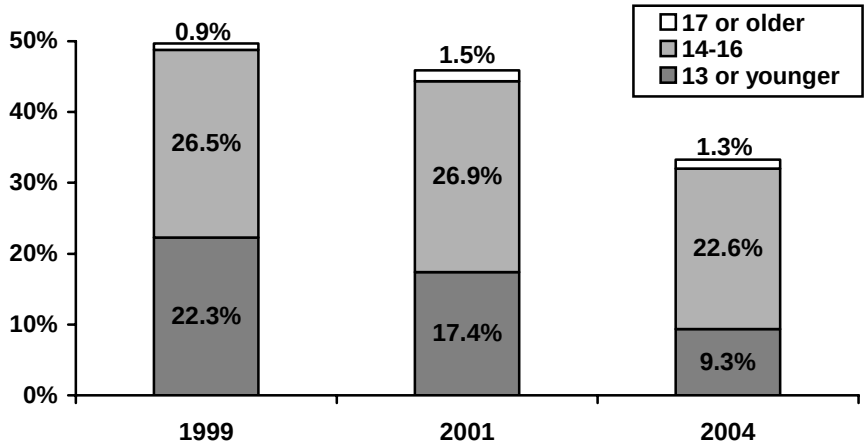
Indicator 8.a Proportion of young people who report having tried a cigarette

Since 1999, there has been a significant decrease in the number of young people who reported having tried a cigarette, even one or two puffs. In middle school, the percent of students who reported ever having tried a cigarette decreased from 34.7% (±3.5) in 1999 to 16.7% (±3.3) in 2004. In high school, the percent of students who reported having ever tried a cigarette decreased from 63.6% (±2.7) in 1999 to 46.2% (±4.0) in 2004. Based on the data from 2004, there were racial differences in ever use of cigarettes among middle school students. Hispanic middle school students (23.8 ±5.4%) were significantly more likely than white middle school students (13.4 ±3.6%) to report having ever tried a cigarette.

Indicator 8.b Age at which young people first smoked a whole cigarette

According to the 2004 NJYTS, the majority of high school students reported having their first whole cigarette between the ages of 14 and 16 (22.6 ±2.5%), while 9.3% (±1.7) had their first cigarette by the age of 13 (see Figure 4.7). In comparison, 26.5% (±2.0) of high school students in 1999 had their first cigarette between 14 and 16 and 22.3% (±1.6) had their first cigarette by age 13.

Figure 4.7: Age of smoking first cigarette among high school students – NJYTS, 1999-2004



Outcome 9. Reduced youth tobacco use prevalence

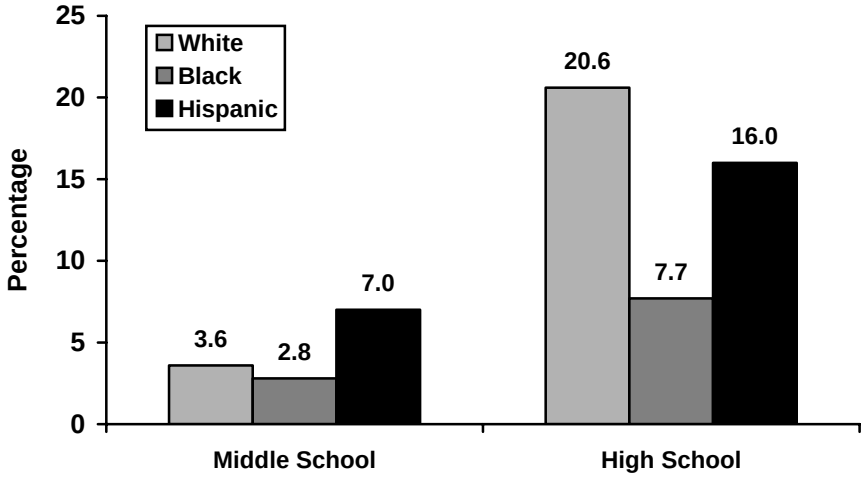
The long-term outcome objective of the CTCP is to see the number of youth tobacco users decline over time. The most relevant indicators to assess this outcome include the prevalence of tobacco among youth and the proportion of youth who are established smokers. These two indicators are summarized below.

Indicator 9.a Prevalence of cigarette smoking among youth

Current use of cigarettes is defined as the use of cigarettes on one or more days in the 30 days preceding the survey. Overall, 4.1% (±1.5) of middle school students and 17.3% (±2.3) of high school students reported smoking a cigarette on one or more days in the 30 days preceding the survey. There were no significant gender differences in current cigarette use among middle or high school students.

Some variation by race/ethnicity was noted in current cigarette use (see Figure 4.8). The percent of Hispanic middle school students reporting current cigarette use (7.0 ±2.6%) was higher compared to white (3.6 ±1.9%) or black (2.8 ±1.7%) middle school students but this difference was not statistically significant. In high school, the percent of white students (20.6 ±2.4%) reporting current cigarette use was significantly higher compared to black (7.7 ±4.3%) students. Current cigarette use significantly declined from 1999 (10.5 ±1.8%) to 2004 (4.1 ±1.5%) for middle school students. In high school, current cigarette use also significantly declined from 1999 (27.6 ±2.6%) to 2004 (17.3 ±2.3%). For both middle and high school students, there were significant decreases in current smoking across all demographic groups from 1999 to 2004.

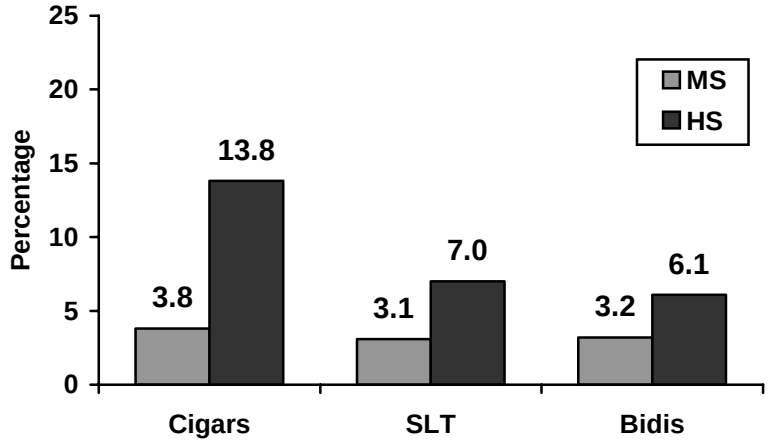
Figure 4.8: Percentage of middle and high school students who were current users of cigarettes, by race/ethnicity – NJYTS, 2004



Indicator 9.b Prevalence of other tobacco use among youth

While cigarette smoking prevalence is decreasing, the use of other tobacco products remains a significant public health concern. New Jersey youth were asked about their current use of cigarettes, cigars, smokeless tobacco, and bidis. Figure 4.9 reflects the percentage of middle and high school students who reported having used a tobacco product other than cigarettes on one or more days in the 30 days preceding the 2004 NJYTS. Between 1999 and 2004, there were significant decreases in the use of all other tobacco products by middle and high school students. However, for current use of smokeless tobacco much of the decline occurred between 1999 and 2001. Current use of all tobacco products by school type, gender, race/ethnicity and school grade is found in Table 1 in the Appendix. Additional details on the use of other tobacco products can also be found in the 2004 New Jersey Youth Tobacco Survey: A Statewide Report.

Figure 4.9: Percentage of middle and high school students who were current users of other tobacco products – NJYTS, 2004

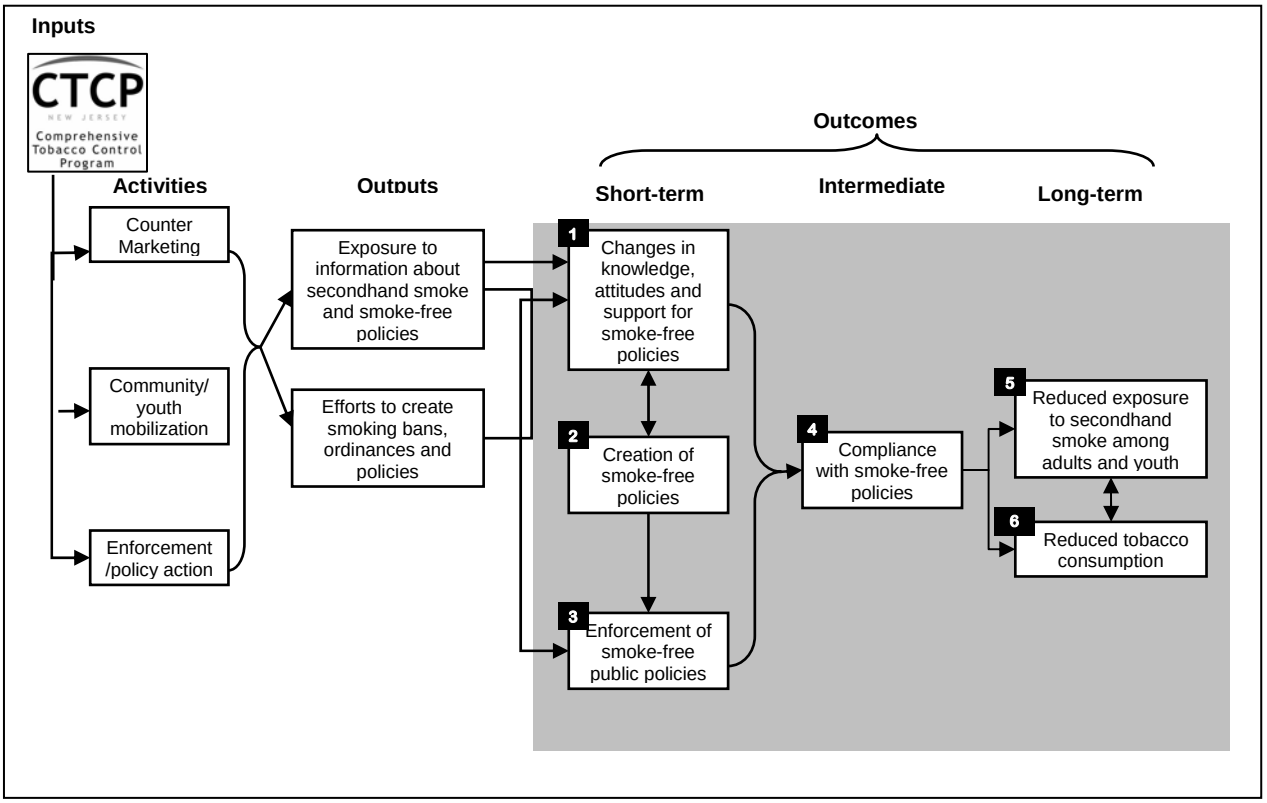


5. ELIMINATING NONSMOKERS' EXPOSURE TO SECONDHAND SMOKE

Secondhand smoke represents a significant public health threat to both smokers and nonsmokers. Youth are particularly vulnerable to the adverse health effects of secondhand smoke including an increased prevalence of pneumonia, bronchitis, coughing and wheezing, worsening of asthma, and middle ear disease (NCI, 1999; USEPA, 1992). Secondhand smoke also contributes to 3,000 lung cancer deaths annually in nonsmoking adults (USEPA, 1992). Policies that eliminate smoking in public places and workplaces have become more pervasive in recent years. The increased number of clean indoor air laws reflects the growing concern for reducing widespread exposure to secondhand smoke. Previous research indicates strong public support, even among smokers, for smoke-free policies in various settings (CDC, 2000).

To assess progress toward this goal, we examined six outcomes and their respective indicators, as detailed in the logic model below (see Figure 5.1). These include, but are not limited to attitudes toward indoor air policies, the prevalence of smoke-free policies at home, school, work, and other indoor environments in New Jersey as well as self-reported exposure among youth and adults.

Figure 5.1: Logic Model for Eliminating Nonsmokers' Exposure to Secondhand Smoke



Short-Term Outcomes

Outcome 1. Changes in knowledge, attitudes and support for smoke-free policies

As indicated in the logic model, an important first step to eliminating exposure to secondhand smoke is changing people's knowledge of the dangers of secondhand smoke, attitudes and societal norms about the acceptability of involuntary exposure to secondhand smoke, and generating support for tobacco-free policies. Three indicators associated with this outcome are summarized.

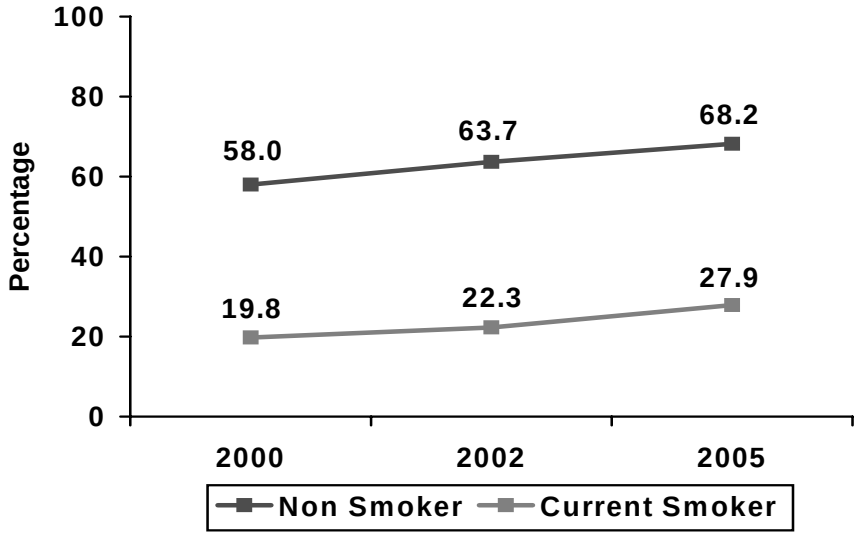
Indicator 1.a Proportion of the population that thinks secondhand smoke is harmful

Overall, the large majority of adults (93.4 ±1.1%) believed that breathing smoke from other people's cigarettes was very or somewhat harmful to one's health. Not surprisingly, current smokers were significantly less likely (84.2 ±3.9%) than nonsmokers (95.3 ±1.1%) to perceive secondhand smoke as harmful. Also, females (95.9 ±1.1%) were significantly more likely than males (90.4 ±2.1%) to believe in the harmful effects of secondhand smoke. There were no differences by race/ethnicity in believing that breathing secondhand smoke was harmful.

Indicator 1.b Level of support for creating smoke-free policies in public places and workplaces

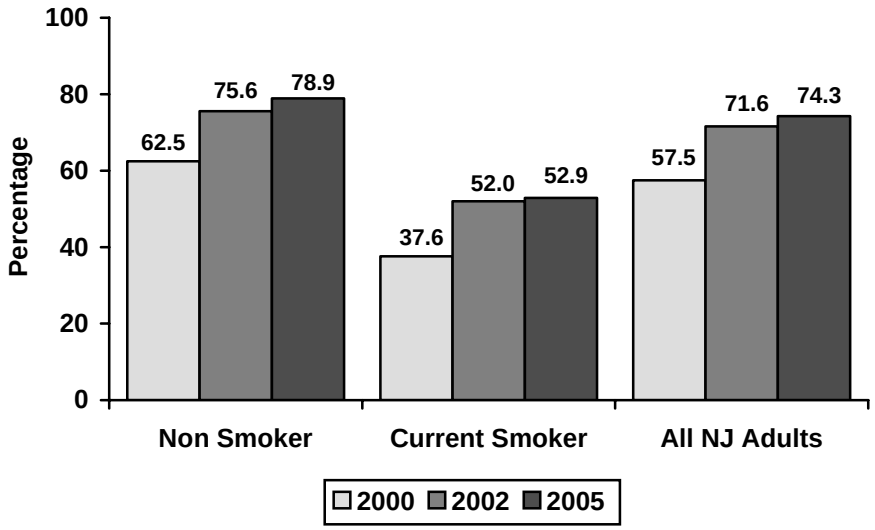
Data in New Jersey suggest that attitudes about banning smoking in restaurants are changing. According to the NJATS, in 2000, 50.4% (±2.4) of all New Jersey adults supported a total ban on smoking in restaurants. In 2002, 56.5% (±2.6) of adults supported a restaurant smoking ban. In 2005, 61.3% (±2.6) of adults supported a ban on smoking in restaurants, representing a 22% increase in support since 2000. As shown in Figure 5.2, even among current smokers, there has been increasing support for a ban on smoking in restaurants. In 2000, 19.8% (±2.9) of current smokers agreed that there should be no smoking allowed in restaurants whereas in 2005, 27.9% (±5.1) of smokers supported such a ban.

Figure 5.2: Percentage of adults who reported support for smoke-free restaurants – NJATS, 2000-2005



The percentage of adults who indicated that workplaces should totally ban smoking (i.e., not allowed at all) was much higher than that for restaurants, even among current smokers. As shown in Figure 5.3, by 2005, almost three-quarters (74.3 ±2.7%) of New Jersey adults indicated support for smoke-free workplaces, a 24% increase in support for smoke-free workplaces since 2000 when 57.5% (±2.3) of adults reported support for smoke-free workplace policies. In addition, support for smoke-free workplaces increased from 37.6% (±3.5) in 2000 to more than half (52.9 ±5.4%) of current smokers in 2005.

Figure 5.3: Percentage of adults who reported support for smoke-free workplaces – NJATS, 2000-2005



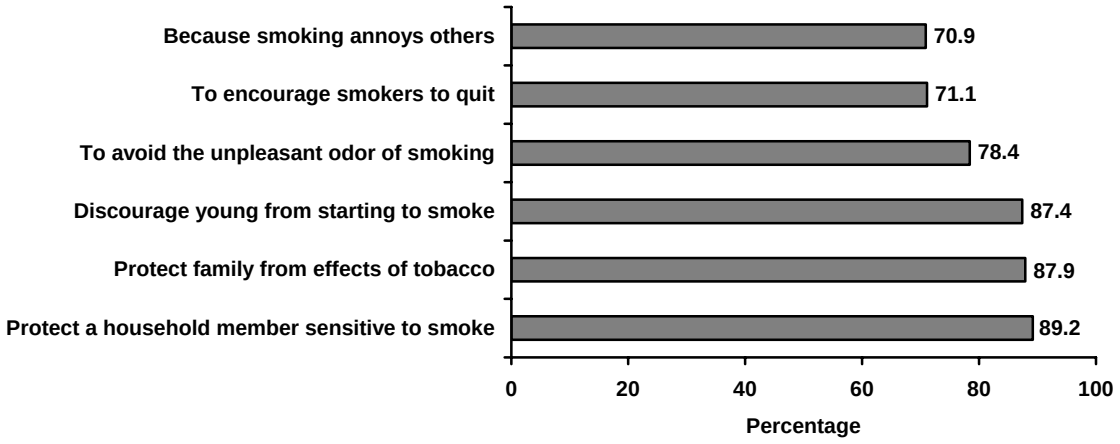
With clean indoor air legislation pending in New Jersey[1], the 2005 NJATS inquired whether or not adults favored or opposed a New Jersey State law prohibiting smoking in all public and work places, including bars and restaurants. Opposition was low; fewer than one out of four New Jersey adults (24.9 ±2.7%) indicated they were opposed to such a law. Opposition was highest among young adults (29.7 ±5.7%) and males (31.4 ±4.8%).

[1] Clean indoor air legislation was pending at the time this report was written. The New Jersey Smoke-Free Air Act has since passed, signed by Governor Codey in January 2006.

Indicator 1.c Level of support for adopting tobacco-free policies in homes and vehicles

Smoke-free policies in homes and vehicles are voluntary. Thus, to reduce exposure to secondhand smoke in homes and vehicles, it is first necessary to increase knowledge and support for such policies. Using data from the 2005 NJATS, Figure 5.4 summarizes the percent of adults who support several important reasons to have a smoke-free home. The top three reasons to have a smoke-free home were to protect a household member who is sensitive to smoke (89.2 ±1.5%), protect one's family from harmful health effects of secondhand smoke (87.9 ±1.5%) and to discourage young people from starting to smoke (87.4 ±1.5%).

Figure 5.4: Reasons to keep a smoke-free home – NJATS, 2005



Outcome 2. Creation of smoke-free policies

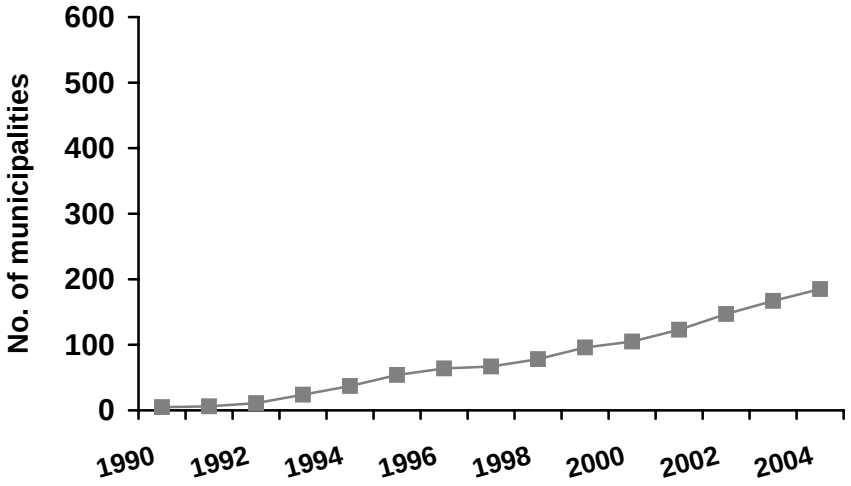
Smoking bans or tobacco-free policies can be initiated by local and/or state governments, employers, and individuals (i.e., bans in homes), and such policies are an effective means to protect the public from secondhand smoke. Indeed, hundreds of cities and towns nationwide have adopted comprehensive clean indoor air laws to protect its citizens. Similarly, nine states, including Connecticut and New York, have passed legislation to ensure smoke-free workplaces, even in restaurants and bars. Four indicators assessing the progress of this outcome in New Jersey are summarized.

Indicator 2.a Proportion of jurisdictions with public policies for tobacco-free workplaces and other indoor and outdoor public places

Figure 5.5 depicts the proportion of municipalities in New Jersey with smoke-free ordinances. While modest growth occurred in the early and mid 1990's, local governments became quite active since the inception of CTCP, with an average of 20 new tobacco use ordinances enacted per year since 2000. As of December 31, 2004, there were 185 ordinances in 154 municipalities

in New Jersey with local ordinances for tobacco-free workplaces, indoor or outdoor public places. While there has been considerable growth, it should be noted that this represents fewer than one-third (27%) of the 566 municipalities in the state.

Figure 5.5: Local ordinances for tobacco-free workplaces, or other indoor and outdoor public places – 1990-2004, Source: NJGASP

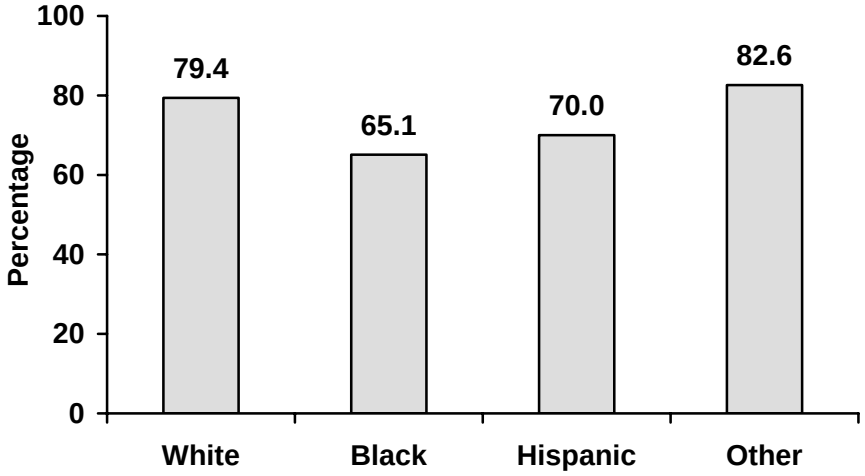


Indicator 2.b Proportion of the population that works in environments with tobacco-free policies

Assessing the proportion of the population that work in environments with tobacco-free policies indicates the degree with which the adult working population is protected from secondhand smoke. Based on results from the 2005 NJATS, roughly three-quarters of adults (76.6 ±3.5%) reported working under a 100% smoke-free workplace policy. A 100% smoke-free workplace policy is defined as a policy that prohibits smoking in common, public, and work areas. Minor improvements are noted from the 2002 NJATS, when 75.1% (±3.4) of adults reported working in a smoke-free environment. However, the NJATS suggests several consistent disparities in the provision of workplace smoking policies by gender, age, race/ethnicity, type of work environment and current smoking status.

As shown in Figure 5.6, a disproportionate number of Hispanic and black adults reported working without a smoke-free workplace policy. Additionally, a smaller proportion of young adults (62.7 ±13.3%) reported working in 100% smoke-free environments relative to all other age groups. Consistent with previous research, males (72.9 ±5.4%) were less likely than females 80.0% (±4.6) to report a smoke-free workplace policy. The demographic disparities may be partly attributed to workers' specific occupation or type of work environment. The 2005 NJATS asked adults to indicate type of work environment by indicating whether they worked in an office, plant/factory, store/warehouse, classroom, hospital, or restaurant/bar. Adults working in a classroom (95.2 ±5.4%), office (82.4 ± 4.2%), or hospital (79.1 ±10.9%) were more likely to report working in a smoke-free environment, followed by those working in a store/warehouse (64.8 ±13.6%). Fewer plant or factory workers (60.2 ±17.0%) and workers in restaurants and bars (46.9 ±27.9%) reported having a 100% smoke-free policy at work.

Figure 5.6: Percentage of adults who reported working under a 100% smoke-free workplace policy, by race/ethnicity – NJATS, 2005



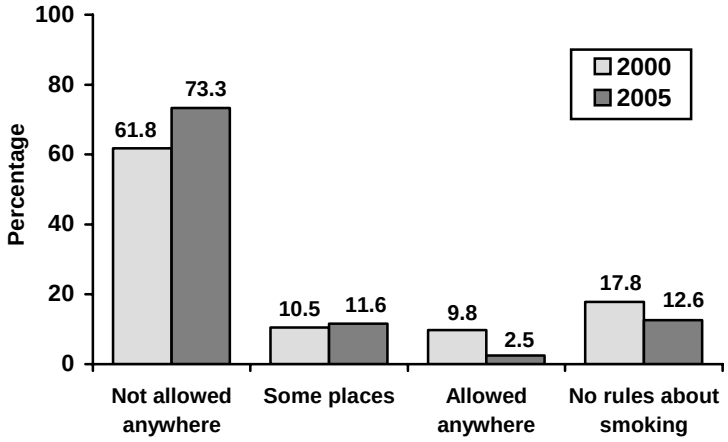
Review of multiple years of NJATS revealed no significant change over time in the proportion of workers protected by a smoke-free workplace policy. Only a statewide workplace smoking ban will insure widespread and equitable access to a 100% smoke-free workplace.

Indicator 2.c Proportion of the population reporting smoke-free policies in the home

Household smoking restrictions are an important step toward limiting a person's exposure to secondhand smoke. According to the 2005 NJATS, 73.3% (±2.4) of adults reported smoking was not allowed anywhere in their home. Figure 5.7 depicts the shifts in home smoking policies since 2000. The percentage of adults reporting smoke-free homes increased significantly from 61.8% (±2.2) in 2000 to 73.3% (±2.4) in 2005, an increase of 18.6%. Also, there were other encouraging changes regarding smoking policies for the home. First, the percentage of adults who reported that smoking was allowed anywhere in the home decreased substantially from 9.8% (±1.3) in 2000 to 2.5% (±0.9) in 2005, a 74% decrease. Second, the proportion of adults with no rules about smoking also decreased from 17.8% (± 1.7) in 2000 to 12.6% (±1.6) in 2005.

Changes were also noted among smokers. The percent of smokers who reported smoking was not allowed anywhere in the home increased from 29.7% (±3.2) in 2000 to 37.7% (±5.3) in 2005. More dramatically, the percent of smokers that indicated that there were any smoking restrictions in their home (i.e., not allowed anywhere or in some places) doubled from 37.2% (±3.4) in 2000 to 73.2% (±4.2) in 2005.

Figure 5.7: Home smoking policies – NJATS, 2000-2005



Indicator 2.d Proportion of schools reporting 100% tobacco-free policies

Based on the 2005 New Jersey School Tobacco Policy Survey (NJSTPS), almost all high schools (98.9%) in New Jersey reported having a policy that prohibits the use of cigarettes by students at school. Roughly nine out of ten prohibited cigarette smoking by faculty (92.2%) and visitors (92.4%). However, a 100% tobacco-free policy is defined as a policy that prohibits the use of *all tobacco* products *by everyone* (i.e., students, faculty and visitors), *in all locations* (i.e., indoors, on school grounds, in school vehicles, and at school sponsored events), 24 hours a day. Less than half of the high schools (47.3%) were categorized as having a 100% tobacco-free policy, representing a slight increase from 2002 when 42.2% of high schools reported a tobacco-free policy. The results for this indicator also appear in Goal Area 2: Eliminating Nonsmokers' Exposure to Secondhand Smoke.

Outcome 3. Enforcement of smoke-free public policies

Smoke-free policies make a difference only when policies are actively enforced and there is high level of compliance. If a statewide clean indoor air law is passed in New Jersey, policy enforcement will be critical for effective compliance.[2] CDC recommends three indicators specific to the enforcement of smoke-free public policies. These are: the number of compliance checks conducted by enforcement agencies, recording responses to complaints, and the number of warnings, citations and fines for infractions of policies. Currently, such data in New Jersey do not exist or are not readily accessible. Thus, it is recommended that the CTCP initiate a mechanism to monitor such enforcement activities.

[2] Clean indoor air legislation was pending at the time this report was written. The New Jersey Smoke-Free Air Act has since passed, signed by Governor Codey in January 2006.

Intermediate Outcomes

Outcome 4. Compliance with smoke-free policies

Increasing the number of smoke-free environments is an important tobacco control strategy that can save lives. And as previously summarized in outcome two, progress is being made in New Jersey. But even the best policies can be rendered ineffective without enforcement and compliance. Furthermore, compliance with voluntary smoke-free policies in private locations (i.e., homes and cars) can also be a proxy for social norms. Three indicators assessing the progress of this outcome in New Jersey are summarized. It should be noted that these three indicators report on perceived compliance. CDC recommends an additional indicator which assesses the proportion of public places observed to be in compliance with smoke-free policies. Data collection activities for this indicator are recommended if clean indoor air legislation is passed in New Jersey.[3]

Indicator 4.a Perceived compliance with tobacco-free policies in workplaces

Based on the 2005 NJATS, 6.6% (±1.9) of adults who worked under the provision of a 100% smoke-free workplace policy reported that someone smoked in their work area during the past seven days. Reported non-compliance was highest in factory (10.6 ±10.8%) and store or warehouse (9.5 ±7.3%) settings. In 2002, 8.2% (±2.5) of adults who worked in a smoke-free environment reported someone smoked in their work area in the past 7 days, representing a small but not statistically significant improvement in compliance during the past three years.

Indicator 4.b Perceived compliance with voluntary tobacco-free home policies

Few adults with a smoke-free home policy reported non-compliance with their home policy (i.e., someone smoked inside their home). In 2005, among those adults who reported that they had a no-smoking policy in their home, 3% (±1.2) reported that someone smoked inside their home in the 30 days preceding the survey whereas in 2002, 4.6% (±1.5) reported similarly.

Indicator 4.c Perceived compliance with smoke-free policies in schools

According to the 2004 NJYTS, 1.3% (±0.7) of middle school students and 7.4% (±1.8) of high school students reported smoking on school property in the last 30 days. Between 1999 and 2004, there was a significant decrease in the proportion of high school students who smoked on school property. Among high school students, smoking on school property decreased from 12.9% (±1.9) in 1999 to 7.4% (±1.8) in 2004. Among middle school students, there was no significant change in compliance between 1999 and 2004; in 1999, 2.5% (±0.6) reported smoking on school property and in 2004, 1.3% (±0.7) reported smoking. This indicator is also described in Goal Area 1: Preventing Initiation of Tobacco Use Among Young People.

[3] Clean indoor air legislation was pending at the time this report was written. The New Jersey Smoke-Free Air Act has since passed, signed by Governor Codey in January 2006.

Long-Term Outcomes

Outcome 5. Reduced exposure to secondhand smoke

A key goal of the CTCP is to reduce exposure to secondhand smoke. The activities and outputs of the CTCP were designed to have an impact on this long-term outcome. To assess progress towards this outcome, two key indicators are summarized below.

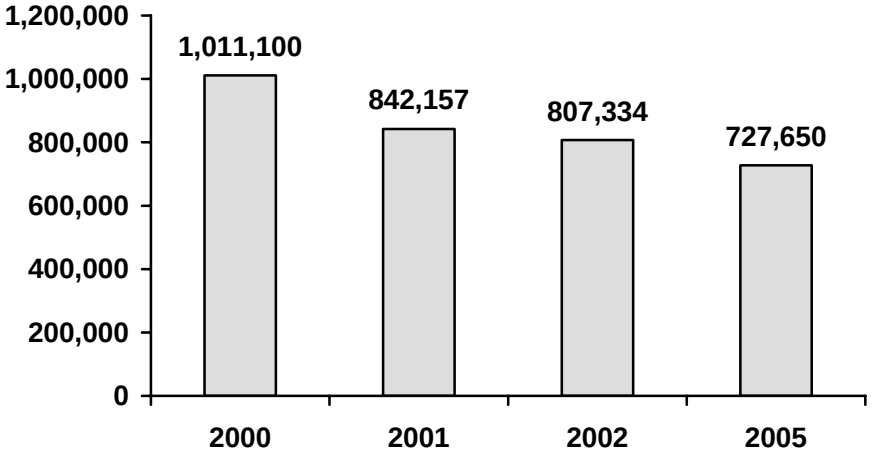
Indicator 5.a Proportion of the population reporting exposure to secondhand smoke in the workplace

While indicator 4.a evaluates compliance based on perceived exposure in workplaces with smoke-free policies, it is important to note almost one out of four adults reported working in locations that did not protect them from tobacco smoke. Thus, the population exposed to secondhand smoke in the workplace is influenced by the absence of a protective policy, the prevalence of smoking at the worksite, and compliance with smoke-free policies. According to the 2005 NJATS, 14.6% (±2.9) of adults who worked indoors reported that they were exposed to smoke in their work area during the seven days preceding the survey, decreasing from 16.4% (±2.8) in 2002. While this may be encouraging, significant disparities persist. Roughly half (48.6 ±26.0%) of those who reported that they worked in a restaurant or bar indicated exposure to secondhand smoke in their work area. Additionally, high rates of workplace exposure were reported by Hispanics (20.9 ±12.6%) and young adults (30.7 ±13.4%).

Indicator 5.b Proportion of the population reporting exposure to secondhand smoke at home

In 2005, 16.3% (±2.1) of adults reported someone, including him or herself, smoked inside their homes during the 30 days preceding the survey. This represents a significant decrease from 2000 where 23.7% (±1.8) of adults reported past 30-day exposure to smoke in their household. One might suspect that the decrease is largely influenced by the changing prevalence rates (i.e., more nonsmokers currently than in the previous years). However, current smokers also reported a decrease in tobacco smoke exposure in their homes, from 63.9% (±3.4) in 2000 to 51.8% (±5.4) in 2005. Accordingly, the estimated number of New Jersey children exposed to tobacco smoke in their home has declined from 2000 to 2005. Based on the number of households reporting that someone smoked inside their home in the previous 30 days, we estimated how many children in those households were potentially exposed to secondhand smoke. As shown in Figure 5.8, an estimated 1,011,100 children in New Jersey were exposed to tobacco smoke in their own home in the 30 days preceding the 2000 survey. Estimates from 2005 indicated that 727,650 New Jersey children were exposed to secondhand smoke at home and accounts for one-third of the under-18 New Jersey population based on U.S. census figures. This represents a 28% decrease in the number of children exposed since 2000.

Figure 5.8: Estimated number of children exposed to secondhand smoke in their home – NJATS, 2000-2005



Data on youth secondhand smoke exposure is also available from the NJYTS. Overall, 43.9% (±3.4) of middle school students and 55.1% (±3.8) of high school students reported being exposed to secondhand smoke inside rooms in the seven days preceding the survey. This finding represents a significant decline since 1999 when 53.4% (±1.3) of middle school students and 64.4% (±1.4) of high school students reported exposure to secondhand smoke in rooms. The decline in secondhand smoke exposure in this adolescent population is partially attributed to the lower prevalence of current smoking among adolescents in 2004 relative to 1999.

Outcome 6. Reduced tobacco consumption

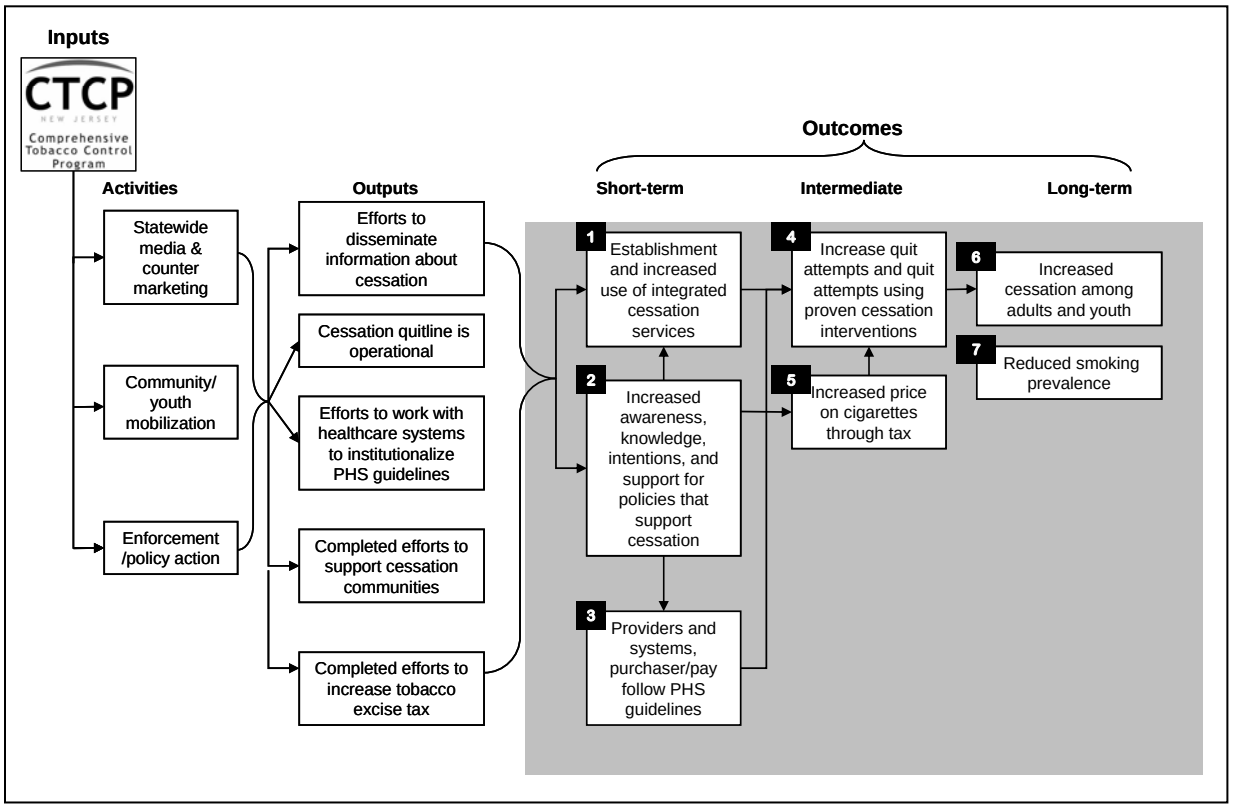
Although the main goal of eliminating secondhand smoke is to protect nonsmokers, a secondary benefit is that strategies that promote smoke-free environments are shown to reduce tobacco consumption. Research clearly indicates that smokers in workplaces with 100% smoke-free policies reduce consumption and increase cessation (Fichtenberg & Glantz, 2002). And, research also suggests that youth who live with nonsmokers and in homes with smoke-free policies are less likely to initiate cigarette smoking (Farkas, et al., 2000). Three indicators summarize progress towards this outcome: per capita consumption of tobacco products, average number of cigarettes smoked per day by smokers, and smoking prevalence. These three indicators are discussed in detail under Goal 3: Promoting Quitting Among Adults and Youth.

6. PROMOTING QUITTING AMONG ADULTS AND YOUTH

The vast majority of smokers want to quit but only a small minority succeed each year. Success rates increase dramatically when smokers use evidence-based treatments such as physician advice, or telephone counseling. Quitting tobacco at any point in life provides immediate and long-term public health gains.

To assess progress toward this goal, we examined seven outcomes and their respective indicators as detailed in the logic model below (see Figure 6.1). These include, but are not limited to, awareness and utilization of cessation services, health care providers' implementation of the Public Health Service guidelines, intentions to quit, quit attempts, quit successes, and the prevalence of cigarette use. The majority of the findings related to this goal focus on adult smokers. However, data for high school students are presented when available.

Figure 6.1: Logic Model for Promoting Cessation



Short-Term Outcomes

Outcome 1. Establishment and/or increased use of cessation services

The CTCP understands the importance of increasing access to and promoting use of cessation services to smokers who want to quit. Effective treatment for tobacco dependence is essential to reducing the prevalence of smoking among all New Jerseyans and can improve overall public health in just a few years. To assess progress toward this outcome, we examined the number of users of Quit services and how users heard about Quit services. Four specific indicators are summarized below.

Indicator 1.a Number of users of NJ Quitline and NJ Quitnet

Figure 6.2 depicts utilization of two of the State's cessation services – New Jersey Quitnet and New Jersey Quitline – since these services began in October 2000. By December 2004, over 6,700 smokers had enrolled in New Jersey Quitline. However, as shown in Table 6.1, enrollment was significantly lower in 2003 and 2004 compared to 2001 and 2002, the first two full years of the programs. The sharp drop in Quitline utilization coincides with funding reductions between 2003 and 2004 (e.g., less paid media). As shown in Table 6.1, total Quitline registrants dropped by 36.8% between 2003 and 2004.

Figure 6.2: Utilization of Quitline and Quitnet, October 2000-December 2004

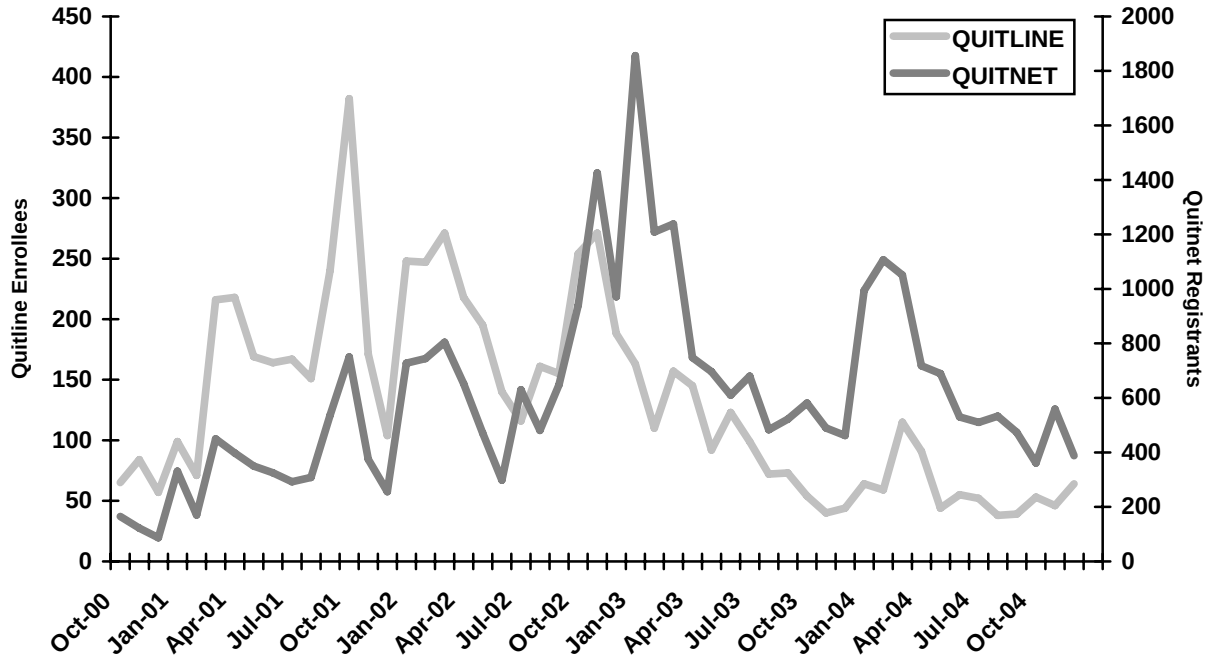


Table 6.1: Number of Quitline and Quitnet registered users by year, 2000-2004

Year	Quitline	Quitnet
2000	206	373
2001	2140	4563
2002	2464	8795
2003	1172	9575
2004	710	7914
TOTAL	6692	31220

By December 2004, a total of 31,220 New Jerseyans became registered users of New Jersey Quitnet to help them with their quit attempts. The total number of Quitnet registrants peaked in 2003 with 9,575 users. While Quitnet also experienced a drop in the number of registered users from 2003 to 2004 (see Table 6.1), it was not as striking as the decrease seen in the number of Quitline users. Indeed, the ratio of Quitnet to Quitline users has increased noticeably. In 2001, there were two Quitnet users for every Quitline user; in 2004, there were 10 times as many users of Quitnet compared to Quitline.

While overall volume is higher for Quitnet, Figure 6.2 illustrates similar patterns of use with the two services, peaking at similar points in time. The pattern of use is likely attributed to seasonal effects (such as New Year's Resolutions beginning in January) as well as variability in state paid mass media and promotional efforts.[4]

Indicator 1.b Number of users who heard about the Quitline or Quitnet through a media campaign

New Jersey Quitline callers and New Jersey Quitnet registrants were asked about how they had heard about the Quit services. From 2001-2004, the majority of Quitline callers reported learning about Quitline through a mass media or promotional effort (62.2%). Overall, television commercials were the most highly cited source of information about Quitline (19.3% of callers), followed by brochures either found or received in a doctor's office (16.3%), and radio commercials (15.9%). Other media-related sources cited included newspapers or magazines (4.6%), bus signs or billboards (4.6%), and the Internet (1.5%). It should be noted that approximately 6% of callers did not report how they had heard about Quitline.

Examining each referral source by year is useful given the variability in the CTCP's funding for media and promotional efforts over the last few years (see Table 6.2). Overall, TV commercials were cited less frequently in 2004 than in each prior year. The Internet as a referral source has increased, which may indicate people learning of Quitline through Quitnet. The percentage of callers who reported learning about the Quitline from a brochure has fluctuated somewhat from year to year but brochures remain the second most cited source overall and were the most cited

[4] Media and promotional efforts included: "Black Box" mailing to NJ health care providers, Feb to Mar 2001; Paid cessation media campaign (TV& Radio), Oct 2001, Apr 2002, Dec 2002, Jun 2003, Jul 2004.

source of information in 2004, more than radio and television commercials. Print materials to promote the Quit Services seem to be effective and physicians' offices serve as an effective means of dissemination for these materials.

Table 6.2: Percentage of Callers Who Heard of Quitline from a Media Campaign Source, 2001-2004

	2001	2002	2003	2004
Internet/Website	0.9	1.3	2.2	3.5
Newspaper/Magazine	7.3	3.9	3.0	2.2
Billboard/Bus Sign	5.5	3.2	4.4	7.9
Radio	13.3	21.5	11.7	12.2
Brochure from Doctor	18.2	14.8	17.1	14.4
TV Commercial	13.9	25.7	21.5	8.2

From 2002 to 2004 (data for 2001 were not available), the majority of Quitnet users (66.6%) indicated that they had learned about Quitnet from a media-related source. During these three years, radio was the most frequently cited source (18.7%), followed by television (17%) and billboards (12.3%). In addition, approximately 10.8% of users reported learning about Quitnet from the Internet, 5.8% from a magazine or handout and 2% from newspapers.

Table 6.3 shows the percentage of users who heard about Quitnet from each media source, from 2002 to 2004. Similar to Quitline, television as a referral source dropped in 2004. In contrast, billboards increased each year from 2002 to 2004 and most notably, the Internet significantly increased as a cited source between 2003 and 2004. However, it should be noted that Internet users are probably more likely to seek self-help resources such as Quitnet and so Internet as a cited source is likely to increase as more adults, including smokers, use the Internet.

Table 6.3: Percentage of Users Who Heard of Quitnet from a Media Campaign Source, 2002-2004

	2002	2003	2004
Newspaper	2.4	1.9	2.0
Magazine/Handout	7.0	6.7	5.0
Billboard	9.8	11.7	14.0
Internet/Website	3.4	4.3	19.0
Radio	22.6	18.8	17.0
Television	26.3	24.2	8.0

Indicator 1.c Number of users who heard about the Quitline or Quitnet through a source other than a media campaign

From 2001 to 2004, users also reported hearing about the New Jersey Quitline from sources other than a media or promotional effort (31.5%). Family and friends were the most frequent non-media related referral source (7.7% of callers), followed by health care providers (6.1%).

In addition, other non-media referral sources cited included insurance companies (3.3%), hospitals (2.3%), and the American Lung Association or the American Cancer Society (1.3%).

Indicator 1.d Proportion of smokers who have used Quitcenters

Lastly, smokers also sought in-depth smoking cessation counseling at New Jersey's Quitcenters. State-funded Quitcenters have seen 5,891 patients between 2001 and 2004.

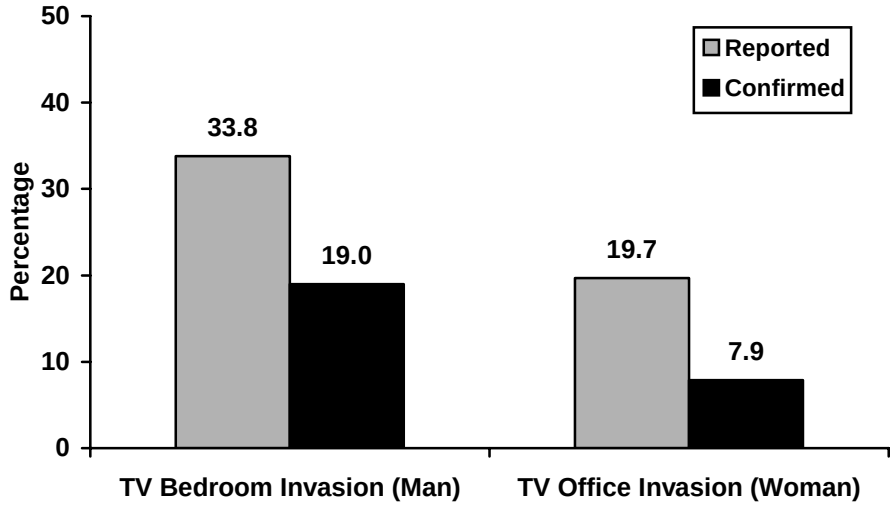
Outcome 2. Increased awareness, knowledge, and intention to quit

As indicated in the logic model, increasing people's knowledge of the benefits of cessation, their awareness and support for cessation resources and policies, and their intentions to quit are important predecessors to the desired long-term outcome of increased cessation. Four indicators associated with this outcome are summarized below.

Indicator 2.a Level of confirmed awareness of media campaign messages on the dangers of smoking and the benefits of cessation

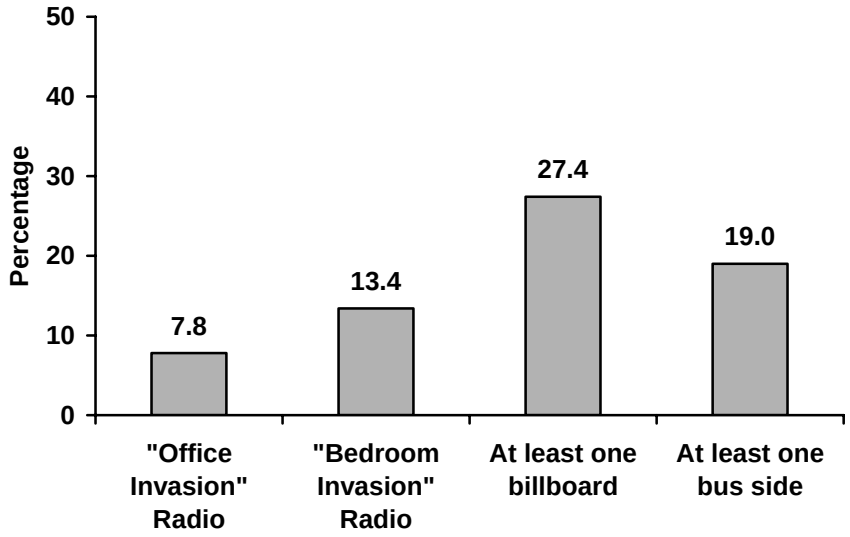
Since the CTCP's inception, there have been several different media campaigns to promote use of the State's Quit services. The 2003 New Jersey Media Tracking Survey (NJMTS) focused on adult awareness of advertisements that promoted New Jersey's cessation services. During the time that the NJMTS was administered, the most current CTCP mass media effort was the "Don't Quit Alone" campaign. Awareness of specific advertisements among New Jersey adults for New Jersey Quit services was highest for the television versions of the two "Invasion" spots. As shown in Figure 6.3, 33.8% reported awareness (said yes to having ever seen it) of the "Bedroom Invasion" spot and 19% confirmed awareness of this ad (were able to describe it correctly). Reported and confirmed awareness were lower for the "Office Invasion" spot.

Figure 6.3: Percentage of adults who reported and confirmed awareness of Quit television advertisements – NJMTS, 2003



Questions concerning other media revealed that 27.4% of respondents reported having seen at least one billboard and 19.8% had seen at least one bus side promoting New Jersey Quit services. Since some respondents reported awareness of a billboard (7.9%) or bus side (6.2%) with a fake slogan, awareness of these two media may be overstated by 5 to 9 percentage points. Awareness was lower for radio spots - 13.4% reported awareness of the "Bedroom Invasion" radio spot and 7.8% for the "Office Invasion" spot, both variants of the television advertisements (see Figure 6.4).

Figure 6.4: Percentage of adults who reported awareness of CTCP radio, billboard, and bus ads – NJMTS, 2002



More recently, the 2005 NJATS assessed adult awareness of anti-tobacco advertising. Based on these data, 74.0% (±2.4) of adults and 85.5% (±3.5) of current smokers reported having seen an anti-tobacco advertisement in the six months preceding the survey. When asked where respondents had seen or heard the anti-tobacco advertisement, 80.6% (±3.0) reported seeing a television ad, 3.8% (±1.1) saw a billboard ad, 2.1% (±10.8) saw a newspaper ad, and 1.2% (±0.6) saw an ad on the side of a bus. Similar patterns were seen among current smokers. It is important to mention that during the 2004 fiscal year (July 2003 to June 2004), the CTCP only ran one anti-tobacco commercial in promotion of the New Jersey Quitline and Quitnet, the "Bedroom Invasion" ad. The commercial featured a group of people who follow a man and keep him from smoking from the time he wakes up until later when he drives to work. Respondents were specifically asked if they had seen this commercial in the last three months and if so, they were asked to confirm awareness by describing something that happened in the advertisement. Approximately 18.5% (±2.2) of adults (and 26.1% ±5.7 of current smokers) indicated that they had seen the ad. When asked about the frequency of seeing the ad, 14.6% (±4.4) of respondents said they had seen it often in the last three months, 36.7% (±5.8) reported seeing it sometimes, and 46.3% (±6.3) reported rarely seeing it in the last three months.

The 2005 NJATS also asked about residents' awareness of another State media campaign which included two advertisements featured on the sides of buses to promote cessation services. Among respondents, 17.1% (±2.1) indicated that they had seen the "Actually, Quitters do Win" ad and 11.2% (±1.9) indicated seeing the "You had to learn to smoke. Now learn to quit" ad. However, it should be noted that 7.0% (±1.6) also reported that they had seen the "Together we'll make smoking history" ad, a fake advertisement used to gauge respondent error.

Finally, respondents were asked whether they had heard of Quit 2 Win, the statewide campaign launched in fall 2004 to encourage smokers to use the State's free and low cost cessation services. Roughly one in five adults (21.7 ±2.3%) indicated that they had heard of the campaign in the last three months preceding the survey. Among current smokers, 26.2% (±4.7) reported that they had heard of the Quit 2 Win campaign.

Indicator 2.b Level of receptivity to anti-tobacco media messages on the dangers of smoking and the benefits of cessation

According to the 2005 NJATS which assessed residents' awareness of the "Bedroom Invasion" spot, 81.7% (±5.3) who were aware of the commercial agreed or strongly agreed that the ad was convincing, and 14.1% (±4.6) indicated that they had talked to someone about the ad. Among smokers, 52.0% (±12.7) stated that the ad gave them ideas on how to quit, and 60.8% (±22.1) of nonsmokers or recent quitters stated that they had talked to a smoker about the ad.

This indicator is important because while message awareness is necessary, it is not sufficient to change people's knowledge, attitudes and behavior – messages must resonate with the audience. The response to the 2005 "Bedroom Invasion" spot suggests that the message did have a resonating effect with viewers. However, as mentioned previously, a larger percentage of people need to be exposed to the message to maximize its effect.

Indicator 2.c Proportion of smokers who are aware of the cessation services available to them

Adult Awareness

Based on the 2005 NJATS, awareness of New Jersey Quitline and Quitnet was highest among current smokers. Among smokers, 61.8% (±5.0) had heard of Quitline compared to 37.6% (±3.0) of nonsmokers and 37.8% (±5.8) of smokers had heard of the Quitnet compared to 19.9% (±2.3) of nonsmokers. The results from 2005 represent a small but significant increase in awareness of Quitnet from 2002, when 30.3% (±4.0) of smokers had ever heard Quitnet. However, the increase in smokers' awareness of Quitline from 2002 (55.3 ±4.2%) to 2005 (61.8 ±5.0%) was not statistically significant. Overall, more people had ever heard of New Jersey Quitline than Quitnet in 2005. Less than half (41.8 ±2.7%) of all adults indicated that they had ever heard of Quitline and 23.0% (±2.3) indicated that they had ever heard of Quitnet.

Youth Awareness

The 2004 NJYTS found that 32.1% (±3.2) of high school students had heard of New Jersey Quitline and 19.1% (±2.3) had heard of New Jersey Quitnet. In addition, 43.6% (±3.0) of high school students indicated that they had ever heard of a program to help teens quit smoking, such as Fresh Start for Teens or Not on Tobacco.

Indicator 2.d. Proportion of smokers who intend to quit

Based on the 2005 NJATS, 75.7% (±4.8) of current smokers reported wanting to stop smoking cigarettes. Nearly two-thirds of smokers (66.9 ±5.3%) indicated that they planned to quit in the next six months and 23.3% (±3.9) reported making plans to quit in the next 30 days. Black (85.8 ±13.9%) and Hispanic (83.0 ±11.6%) smokers were more likely than white smokers (73.2 ±5.8%) to report wanting to stop smoking cigarettes. Females were also more likely than males (80.5 ±4.4% vs 71.7 ±8.0%) to report wanting to stop smoking. The proportion of adult smokers who reported intent to quit did not significantly change since the 2002 NJATS. However, it should be noted that, based on the NJATS, there were fewer smokers in New Jersey in 2005 than in 2002.

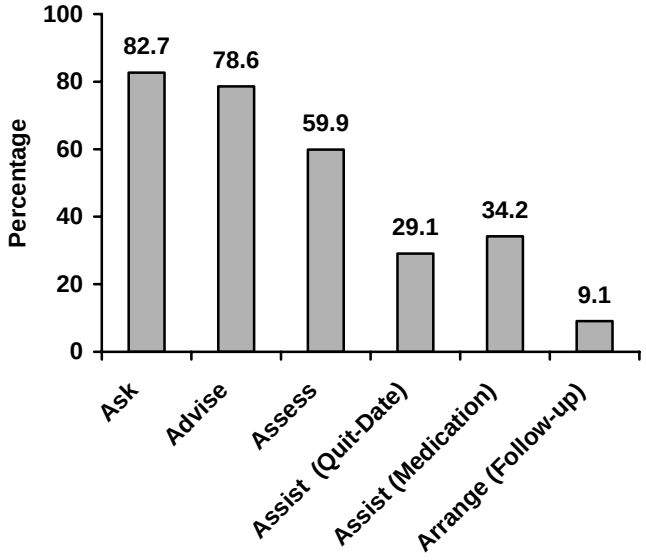
Outcome 3. Increase in the number of health care providers and health care systems following the Public Health Service (PHS) guidelines

To monitor trends in clinician counseling for tobacco cessation, the U.S. Public Health Service's Clinical Practice Guidelines for Tobacco Cessation were considered (Fiore, 2000). The guidelines are intended to become part of standard care and recommend that clinicians treat patients using the "5 A's" (Ask, Advise, Assess, Assist, and Arrange). Four indicators are related to this outcome and are summarized as follows.

Indicator 3.a Proportion of health care providers and health care systems that have fully implemented the public health service (PHS) guidelines

The 2002 New Jersey Health Care Provider Survey (NJHCPS) asked health care providers about the extent to which they implement tobacco treatment in their practices. Figure 6.5 describes the rates of "always" implementing the 5 A's among health care providers by their patient population. Providing smokers with treatment for tobacco dependence begins with asking or systematically identifying tobacco users at every visit to their physician. Health care providers reported high rates of routinely ASKING all patients about their smoking status. More than three-quarters of providers reported ADVISING all smokers to quit. Over half of all providers reported "always" ASSESSING the patient's interest in quitting (i.e., stage of change). Providers treating adolescent patients were significantly less likely to ASSESS interest in quitting. Providers less frequently ASSISTED with quitting by helping the patient set a quit date and/or discussing medication. Lastly, fewer than one out of three providers reported "always" discussing quit dates or medication. Lastly, providers rarely ARRANGED follow-up.

Figure 6.5: Adherence to clinical practice guidelines for tobacco dependence treatment – NJHCPS, 2002



Indicator 3.b Proportion of adults who have been asked by a health care professional about smoking

Providing smokers with treatment for tobacco dependence begins with ASKING or systematically identifying tobacco users at every visit to their physician. Based on the 2005 NJATS, 87.6% (±3.2) of current smokers who visited a physician in the past year reported being asked about their smoking status, a small but insignificant increase from 2002 when 83.8% (±3.3) reported being asked by a physician. There were no differences by gender, age or race/ethnicity.

Indicator 3.c Proportion of smokers who have been advised to quit smoking by a health care professional

A critical next step for clinicians is to ADVISE or strongly urge all smokers to quit. Among smokers who visited a physician in the past year, 72.6% (±5.0) reported that their provider advised them to quit smoking. Females (69.7 ±7.1%) were less likely than males (76.4 ±6.6%) to report being advised to quit. Young adults (65.9 ±15.9%), adults over the age of 65 (67.5 ±12.2) and Hispanic smokers also reported lower rates (62.2 ±18.3%) of physician advice compared to the overall population.

Indicator 3.d Proportion of smokers who have been assisted in quitting smoking by a health care professional

Providers should ASSIST smokers with quitting. Based on the 2005 NJATS, 28.2% (±5.4) of smokers indicated that their physician advised them on how to quit, 37.9% (±6.2) reported that their provider either recommended or prescribed pharmacologic adjuncts for smoking cessation and 22.6% (±5.0) indicated their provider recommended setting a quit date. These trends are unchanged from 2002.

Overall, only a small proportion of smokers in 2005 reported being referred to at least one of New Jersey's cessation services by their physician. However, there was some progress toward this goal. In 2005, 11.5% (±3.5) of smokers reported that their provider referred them to New Jersey Quitline, up from 7.8% (±3.0) in 2002. Similarly, reports of referrals to Quitnet increased from 4.9% (±2.1) in 2002 to 7.6% (±3.0) in 2005 and referrals to Quitcenters increased from 4.6% (±2.2) in 2002 to 6.0% (±2.8) in 2005.

Intermediate Outcomes

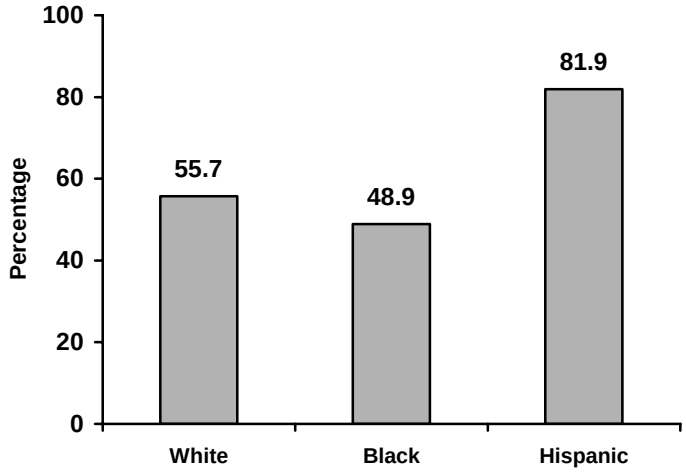
Outcome 4. Increased number of quit attempts

Quit attempts are the broadest measure of cessation activity and thus are an important intermediate step to increasing cessation among adults and youth. The following three indicators relate to quit attempts.

Indicator 4.a Proportion of adult smokers who have made a quit attempt

A quit attempt was defined as any quit attempt lasting one day or longer (i.e., successes and failures) in the past 12 months as reported by current smokers and previous year smokers (i.e., recent quitters). Based on the 2005 NJATS, approximately two-thirds of current and previous year smokers (58.1 ±5.1%) made a serious quit attempt in the past year. Quit attempts differed by age. Young adults (aged 18 to 24) reported the highest proportion of quit attempts (69.4 ± 9.7%). No differences were noted by gender. As shown in Figure 6.6, there were significant differences by race/ethnicity with Hispanic smokers reporting the highest proportion of quit attempts (81.9 ±11.0%) compared to white (55.7 ±5.8%) or black smokers (48.9 ±15.6%). Quit attempts have not significantly increased over the last three years among adult smokers - from 55.8% (±4.0) in 2002 to 58.1% (±5.1) in 2005.[5]

Figure 6.6: Percentage of current and previous smokers who made a serious quit attempt in the past year, by race/ethnicity – NJATS, 2005



[5] Estimates of serious quit attempts from the 2000 and 2001 NJATS were not included as they are not directly comparable to estimates from the 2002 and 2005 NJATS.

Indicator 4.b Proportion of young smokers who have made a quit attempt

According to the 2004 NJYTS, 50.5% (±4.9) of high school students made a serious quit attempt in the last year. More specifically, 32.0% (±4.6) reported making one serious quit attempt in the last year and 68.0% (±4.6) reported making two or more quit attempts in the last year. Among daily high school smokers, 53.7% (±9.8) reported a past year quit attempt and 50.1% (±6.7) of frequent smokers made a quit attempt. Overall, 59.3% (±7.0) of middle school students reported making a serious quit attempt in the last year. Among middle school students, 50.6% (±15.9) of frequent smokers and 61.6% (±8.2) of daily smokers reported a past year quit attempt.

Indicator 4.c Proportion of adult and young smokers who have made a quit attempt using proven cessation methods

Based on the 2005 NJATS, 20.7% (±4.6) of adults with a quit attempt in the past year (including current smokers and recent quitters) reported that they used something to help them quit smoking. Specifically, among adults with a past year quit attempt, 17.7% (±4.2) used medication, 5.9% (±2.2) used a self-help material (i.e., booklet or video), 2.5% (±1.9) used New Jersey Quitnet, 1.0% (±0.7) used a cessation class or program, and 0.5% (±0.5) called the New Jersey Quitline. Among those reporting use of medication, 57.5% (±11.7) used a nicotine patch, 43.6% (±11.9) used nicotine gum, 23.7% (±1.9) used Wellbutrin, 21.3% (±9.4) used Zyban/Bupropion, 7.2% (±6.1) used a nicotine inhaler, and 2.5% (±2.5) used a nasal spray.

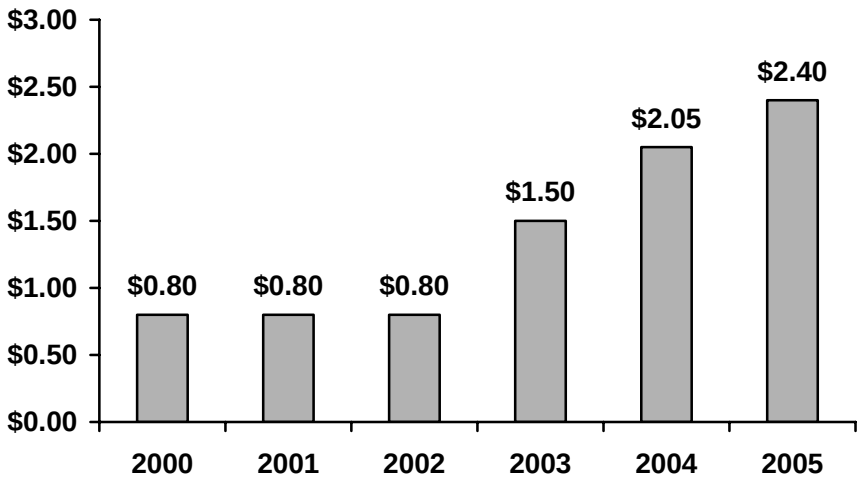
Outcome 5. Increased price on cigarettes through tax

Raising the price of cigarettes is one of the proven ways to encourage quitting. Increasing the state cigarette excise tax is an effective method of increasing the real price of cigarettes. As such, an important indicator to assess efforts to promote quitting among youth and adults is the amount of the tobacco product excise tax.

Indicator 5.a Amount of tobacco product excise tax

There is strong agreement among researchers and the tobacco control community that excise tax increases have a major impact on tobacco use. New Jersey has consistently had one of the highest cigarette excise taxes in the nation. For nearly a decade, the cigarette excise tax remained at 40 cents per pack until January 1, 1998 when the tax was raised to $0.80 per pack, making it the third highest cigarette excise tax at the time (see Figure 6.7). On July 1, 2002, New Jersey implemented a 70-cent cigarette tax increase, giving the State the highest cigarette tax in the nation, tied with New York at $1.50. The State raised its cigarette excise tax again to $2.05 on July 2003, standing alone as the highest cigarette excise tax in the nation, with Rhode Island trailing behind at $1.71. As of January 2004, the average tax rate for a pack of cigarettes in non-tobacco producing states was $0.82, making New Jersey's cigarette excise tax rate of $2.05 at the time about 150% above the average. On July 1, 2004, New Jersey raised its cigarette excise tax again to $2.40 and is currently (as of September 2005) one of only five states with a cigarette excise tax of $2 or more.

Figure 6.7: New Jersey's cigarette excise tax, 2000-2005



While the State raised its cigarette excise tax three times in as many years, it rolled back the ad valorem (i.e., percentage of price) excise tax on other tobacco products in 2002, from 48% to 30%. As such, there is a large disparity between the State cigarette excise tax and the State excise tax on other forms of tobacco. Lower prices have been associated with experimentation with or switching to other tobacco products.

Long-Term Outcomes

Outcome 6. Increased cessation among adults and youth

Increasing cessation requires that current smokers quit. Many smokers actively try to quit but are unsuccessful. Individual- and population-level strategies, like those described above, should increase cessation among both youth and adults. To assess progress toward this outcome, we examined the proportion of quitters and recent quitters in New Jersey.

Indicator 6.a Proportion of smokers who have sustained abstinence from tobacco use

Based on the 2005 NJATS, 28.7% (±2.7) of adults in New Jersey were former smokers (i.e., had smoked more than 100 cigarettes in their lifetime but were not smoking now) and 8.2% (±3.1) of former smokers in New Jersey quit within the past year.

Quit success or cessation rates were calculated based on the proportion of previous year smokers (i.e., recent quitter) who quit within the 12 months prior to the survey. Specifically, a recent quitter was defined as someone who smoked 100+ cigarettes in a lifetime, reported currently smoking "not at all" and stopped smoking regularly within the past year (NCI, 2000). In 2005, 11.9% (±4.3) of previous year smokers were abstinent at the time of the survey, little change from 2002 when the abstinence rate among previous year smokers was 10.9% (±2.7).

Outcome 7. Reduced smoking prevalence and consumption

The ultimate measure of success for a tobacco control program is the prevalence of cigarette smoking among the general population (NCI, 2000). Smoking prevalence is a function of both prevention and cessation. Detailed prevalence rates for youth and adults by demographic characteristics are presented in Appendix 1. Three indicators relate to the outcome of reduced smoking prevalence and consumption and are summarized below.

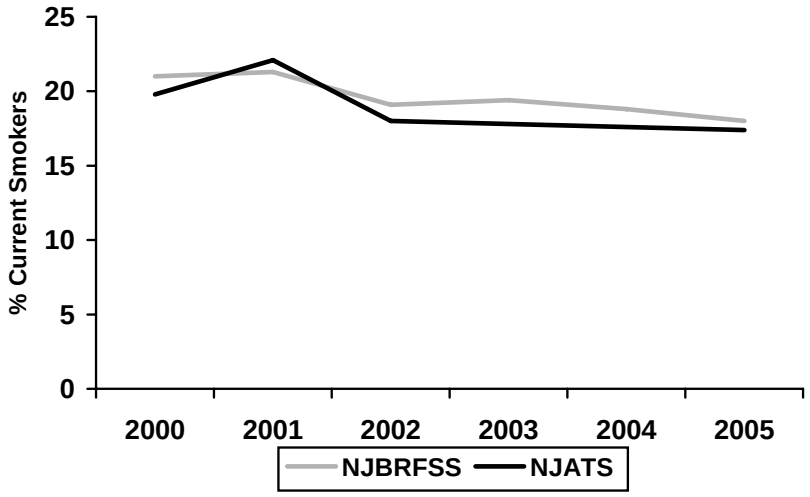
Indicator 7.a Smoking prevalence

Adults
According to the 2005 NJATS, 17.4% (±1.8) of adults in New Jersey reported being current cigarette smokers at the time of the survey. As in previous years, males were more likely to be current cigarette smokers (19.8 ±3.1%) than females (15.4 ±2.1%). While there were no significant differences in current cigarette smoking between white (18.3 ±2.1%) and black (22.0 ±7.3%) adults, significantly lower rates were noted among Hispanic (13.6 ±4.4%) adults.

With regards to trends over time, we report adult smoking prevalence from two data sources in New Jersey—the Adult Tobacco Survey (ATS) and the Behavioral Risk Factor Surveillance Survey (BRFSS). Both surveys use the same measures for adult smoking prevalence. A current smoker is defined as someone who has smoked 100 cigarettes in their lifetime and now smokes everyday or some days. Because survey estimates can be affected by timing (e.g., seasonality), sampling differences and question ordering, it is useful to examine trends from more than one data collection system for consistency.

The figure below (see Figure 6.8) depicts annual estimates from the ATS and BRFSS. For each given year, estimates for each survey were within each other's 95% confidence interval. With the exception of 2001, the ATS estimate is lower than the BRFSS estimate, consistent with other research comparing tobacco specific surveys and general health surveys (Cowling, et al., 2003). Data from both ATS and BRFSS consistently demonstrate that current smoking among adults is declining in New Jersey.

Figure 6.8: Percentage of current cigarette smokers among adults in New Jersey – NJBRFSS & NJATS, 2000–2005



Youth

As mentioned previously in Chapter 4, prevalence of current cigarette smoking continues to decline among youth in New Jersey. Current use of cigarettes is defined as the use of cigarettes on one or more days in the 30 days preceding the survey. Based on the 2004 NJYTS, 4.1% (±1.5) of middle school students and 17.3% (±2.3) of high school students reported smoking a cigarette on one or more days in the 30 days preceding the survey. There were no significant gender differences in current cigarette use among middle or high school students.

Some variation by race/ethnicity was noted in current cigarette use. The percent of Hispanic middle school students reporting current cigarette use (7.0 ±2.6%) was higher compared to white (3.6 ±1.9%) or black (2.8±1.7%) middle school students but this difference was not statistically significant. In high school, the percent of white students (20.6 ±2.4%) reporting current cigarette use was significantly higher compared to black (7.7 ±4.3%) students.

Current cigarette use significantly declined from 1999 (10.5 ±1.8%) to 2004 (4.1 ±1.5%) for middle school students. In high school, current cigarette use also significantly declined from 1999 (27.6 ±2.6%) to 2004 (17.3 ±2.3%). For both middle and high school students, there were significant decreases in current smoking across all demographic groups from 1999 to 2004.

Indicator 7.b Prevalence of tobacco use during and after pregnancy

Smoking during pregnancy nearly doubles a woman's risk of having a low-birth weight baby and after pregnancy, a smoking mother risks exposing her family to secondhand smoke. Clearly, monitoring tobacco use among pregnant women is important given the impact on maternal and child health. Data collected on birth certificates and reported to CDC's National Vital Statistics System indicated that, in 2002, smoking during pregnancy was reported by 8.5% of all women giving birth in New Jersey, a decrease of 36% from 1990, when 13.2% reported smoking (Martin, et. al, 2003).

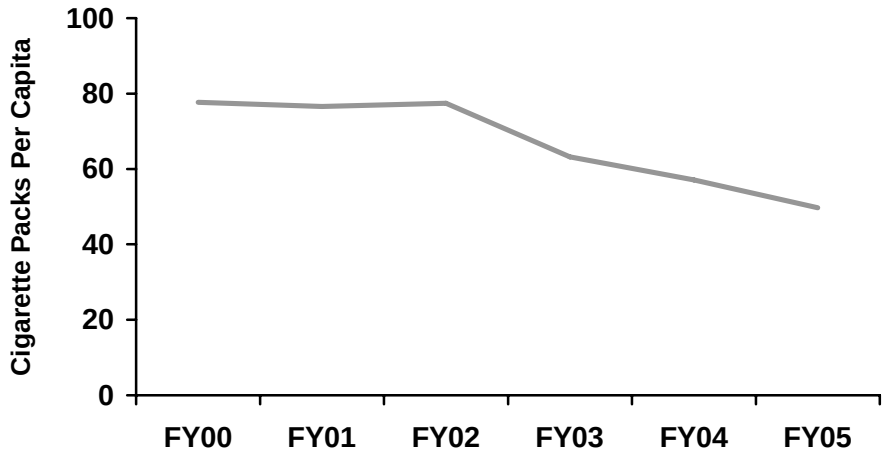
Based on data from the 2002 NJ Pregnancy Risk Assessment Monitoring System (PRAMS), 17.5% of New Jersey women reported cigarette smoking during the three months prior to becoming pregnant, though prevalence dropped to 9% during the last trimester. These figures have remained nearly identical since data were collected in 2000. White pregnant women had higher rates of smoking prior to, during, and post pregnancy (22.8%, 11.6%, 16.3%, respectively) than Black (14.8%, 9.0%, 14.4%) or Hispanic (13.0%, 6.7%, 9.8%) women. However, while smoking prevalence dropped to 9.0% during the last trimester, after birth, 13.2% of women reported cigarette smoking.

Indicator 7.c Per capita consumption of tobacco products

For each pack of cigarettes sold in New Jersey, excise tax stamps are required. We obtained data from the New Jersey Department of Revenue, Division of Taxation to summarize trends in per capita consumption. As depicted in Figure 6.9, per capita cigarette consumption in New Jersey continues to drop. In FY00, 77.7 packs of cigarettes were sold for every adult in New Jersey while in FY05, per capita consumption declined to 49.7 packs. Consumption leveled off between

FY00 and FY02 and then declined dramatically in FY03 and FY04, coinciding with additional excise tax increases.

Figure 6.9: Per capita cigarette consumption in New Jersey, by fiscal year – FY00-FY05, Source: NJ Department of Revenue, Tax Stamp Data



Research shows that higher cigarette prices are associated with decreased rates of tobacco use, particularly among children, adolescents, and pregnant women (Grossman & Chaloupka, 1997; Ringel & Evans, 2001). About half of the decline is attributed to cessation (i.e., change in prevalence) whereas the remaining difference is attributed to decreased consumption among smokers (USDHHS, 2000). A small proportion of the decline may also be attributed to cigarettes being purchased out of New Jersey.

Indeed, these consumption figures only represent cigarettes that are legally sold in New Jersey. The availability of cigarettes from non- or lower taxed sources, such as other states, by Internet, or mail order, undermines the health impact of higher cigarette prices and impedes the State's efforts to collect appropriate tobacco taxes from its own residents. As illustrated in the 2002 New Jersey Adult Tobacco Survey Report, it is estimated that everyday smokers purchased 23,588,028 packs of cigarettes outside of New Jersey during the last six months of 2002 ($1.50 tax effective July 1, 2002), a loss of $35,382,042 in tax revenue for New Jersey.

7. COMPARISON OF NJ TO REST OF U.S. ON TOBACCO CONTROL

It is obvious that the characteristics of a state can influence its tobacco control efforts, including regional, cultural, economic, and political factors. However, a comparison of state-level and national data allows us to gauge how New Jersey has kept pace with the rest of the U.S. on standard markers of progress in tobacco control. The objective of this section is to compare the CTCP with the rest of the U.S. on program inputs and outcomes such as tobacco control funding, tobacco excise taxes, smoking prevalence among youth and adults, and indoor air policies.

Funding for Tobacco Control

Table 7.1 shows the level of tobacco control funding in New Jersey over the last five years. The FY00 (July 1, 1999 to June 30, 2000) budget signed by then-Governor Christine Todd Whitman in 1999 allocated 20%, or $18.6 million, of the state's $92.8 million initial MSA payment for tobacco prevention. NJDHSS began implementing the CTCP on July 1, 2000.

CDC's Best Practices recommends that the State of New Jersey spend between $45.1 million and $121.3 million a year to have an effective, comprehensive tobacco control program. In FY01 (July 1, 2000 to June 30, 2001), the CTCP received nearly $32 million from state, federal, and non-governmental sources. This amount was 71% of the CDC's $45 million minimum funding estimate for New Jersey and ranked New Jersey 11th among all states for tobacco prevention funding. Similarly in FY02 and FY03, New Jersey invested roughly $32 million dollars in tobacco prevention. In June 2002, New Jersey was hailed by the Campaign for Tobacco Free Kids as one of the nation's new leaders in tobacco control by maintaining a significant commitment to tobacco prevention in the face of budget problems (CTFK, 2002).

Table 7.1: The history of tobacco control funding in New Jersey

	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
CTCP funding (in millions)	18.6	32.0	32.5	32.5	10.5	11.0
% of CDC min. recommendation	41%	71%	72%	72%	23%	23%
Rank Among States (1-51)	19	11	11	11	30	30

In FY03, New Jersey sold to investors, or securitized, the rights to more than 50% of its future MSA payments for a smaller, upfront payment. At least 20 states and DC have securitized their MSA funds. New Jersey used its proceeds to help balance the budget. Securitization eliminates or greatly reduces the amount of settlement money available to the State. As a result of the securitization, the CTCP is now funded by a portion of the monies collected from the State's cigarette excise tax.

The FY04 (July 1, 2003 to June 30, 2004) State budget reduced funding for the CTCP by 65%, from $30 million in FY03 to $10.5 million in FY04. Funding for current fiscal year 2005 (July 1, 2004 to June 30, 2005) remained at roughly $11 million. This is 23.3% of the CDC's minimum recommendation and now ranks New Jersey 30th among the states in the funding of tobacco prevention programs. New Jersey is currently one of 16 states, which commits less than 25% of the CDC's minimum recommended estimate for tobacco prevention.

Tobacco Excise Taxes

There is strong evidence that tobacco tax increases have a major impact on tobacco use. New Jersey has consistently had one of the highest cigarette excise taxes in the nation. For nearly a decade, the cigarette excise tax remained at 40 cents per pack until January 1, 1998 when the tax was raised to $0.80 per pack, making it the third highest cigarette excise tax at the time (tied with Hawaii). On July 1, 2002, New Jersey implemented a 70-cent cigarette tax increase, giving the State the highest cigarette tax in the nation, tied with New York at $1.50. The State raised its cigarette excise tax again to $2.05 on July 2003, standing alone as the highest cigarette excise tax in the nation, with Rhode Island trailing behind at $1.71. The State's cigarette tax was recently increased for the third time in as many years to $2.40 on July 1, 2004, second to Rhode Island at $2.46.

As of September 2005, New Jersey was one of only five states with a cigarette excise tax of $2 or more. As of July 2005, the average tax rate for a pack of cigarettes in non-tobacco producing states was approximately $1.00 per pack, making New Jersey's cigarette excise tax rate of $2.05 roughly double the average of these other states (CTFK, 2005).

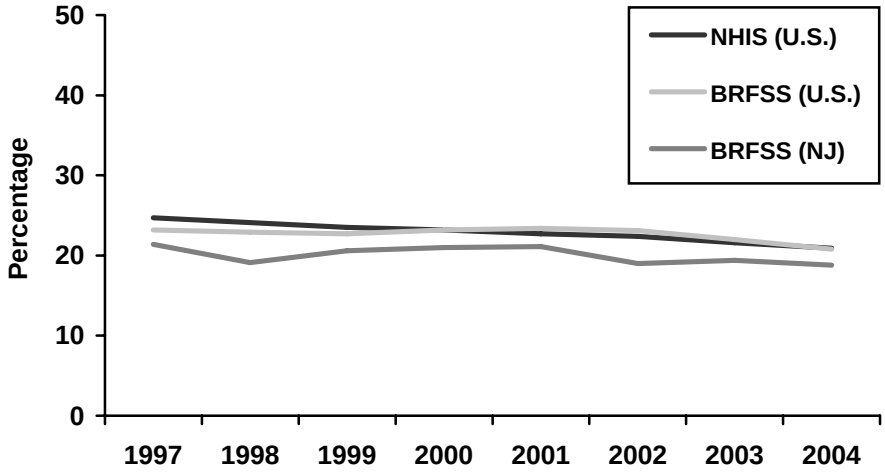
While the State has taken an aggressive approach to the taxation of cigarettes, it rolled back the ad valorem (i.e., percentage of price) excise tax on other tobacco products in 2002, from 48% to 30%. The average tax rate of states that tax other tobacco products at a percentage rate is roughly 30% of wholesale or manufactures price. The states of Washington, Massachusetts, and Alaska have the highest taxes of 129.42%, 90%, and 75% of wholesale or manufactures price, respectively (CTFK, 2005).

Prevalence of Smoking

Adults

Since the late 1990s, there has been a consistent downward trend in the prevalence of current smoking among adults in the United States. Based on the National Health Interview Survey (NHIS), the prevalence of current smoking among U.S. adults has declined over time from 24.7% in 1997 to 20.9% in 2004 (see Figure 7.1).

Figure 7.1: Trends in adult smoking prevalence in U.S. and New Jersey – BRFSS and NHIS, 1997-2004

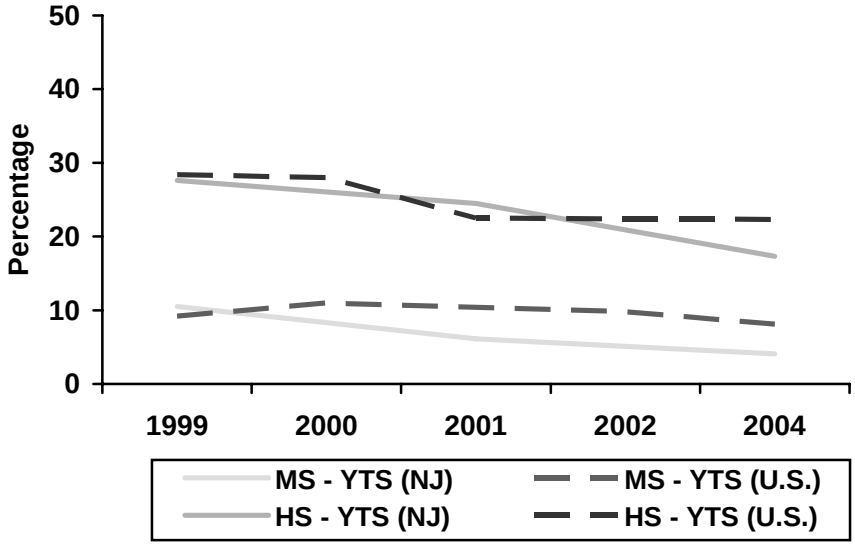


For the last several years, adult smoking prevalence in New Jersey has remained slightly below the median U.S. prevalence estimate. The large increase in the cigarette excise tax over the last few years has undoubtedly had some impact on adult smoking prevalence in New Jersey.

Youth

The National Youth Tobacco Survey (NYTS), which serves as a benchmark for comparable state Youth Tobacco Surveys, allows for comparison between national and state-specific prevalence estimates. Current cigarette use significantly declined between 2001 and 2004 among high school students in New Jersey. However, the NYTS observed no changes in cigarette smoking prevalence among middle or high school students between 2002 and 2004 (CDC, 2005b). Figure 7.2 illustrates the considerable decline in cigarette use among high school students in New Jersey compared to the U.S. overall.

Figure 7.2: Trends in youth smoking prevalence in U.S. and New Jersey – YTS, 1999-2004



In 2004, current cigarette use among New Jersey middle and high school students (4.1%, 17.3%, respectively) was significantly lower than the national estimates (8.1%, 22.3%) (CDC, 2005b). The rate of decline in youth smoking prevalence in New Jersey has exceeded the decline seen among youth overall in the U.S..

Clean Indoor Air Policy

New Jersey law requires private employers with 50 or more employees to establish written rules to protect employees from secondhand smoke. Over 80% of New Jersey workplaces currently have a total ban on indoor smoking but only about one-third of New Jersey's eating and drinking establishments are currently smoke-free (Osinubi, 2003a, 2003b).

In June 2000, Princeton passed New Jersey's first comprehensive smoke-free indoor air ordinance for all work and public places, including restaurants and bars. But the Township and

Borough were sued by the tobacco industry plus two restaurants and a bar and, in September 2000, the Mercer County Superior Court struck down Princeton's ordinance, ruling that State law preempted (prohibited) Princeton's local legislation (njgasp.org). Since this ruling, more than 15 local ordinances have been passed making other indoor areas smoke-free, though none includes restaurants and bars, largely out of fear of a lawsuit. Also, more than 70 municipalities have enacted smoke-free air legislation for outdoor areas including building entrances, schools, parks, and beaches.

As of October 2005, there were nine entire states – California, Connecticut, Delaware, Maine, Massachusetts, Montana, New York, Rhode Island, Vermont – that prohibited smoking or had passed legislation to prohibit smoking in all work and public places including bars and restaurants. Although many versions of a clean indoor bill have been introduced in the New Jersey legislature since the 1990s, no statewide law in New Jersey protects all employees in all workplaces from secondhand smoke. In March 2005, a bill known as the New Jersey Clean Indoor Air Act, that would ban smoking in most public venues was approved by the Senate Health committee.[6]

[6] Clean indoor air legislation was pending at the time this report was written. Renamed the New Jersey Smoke-Free Air Act, the bill to ban smoking in nearly all public places was signed into law by Governor Codey on January 18, 2006.

8. CONCLUSIONS AND RECOMMENDATIONS

Preventing Initiation of Tobacco Use among Young People

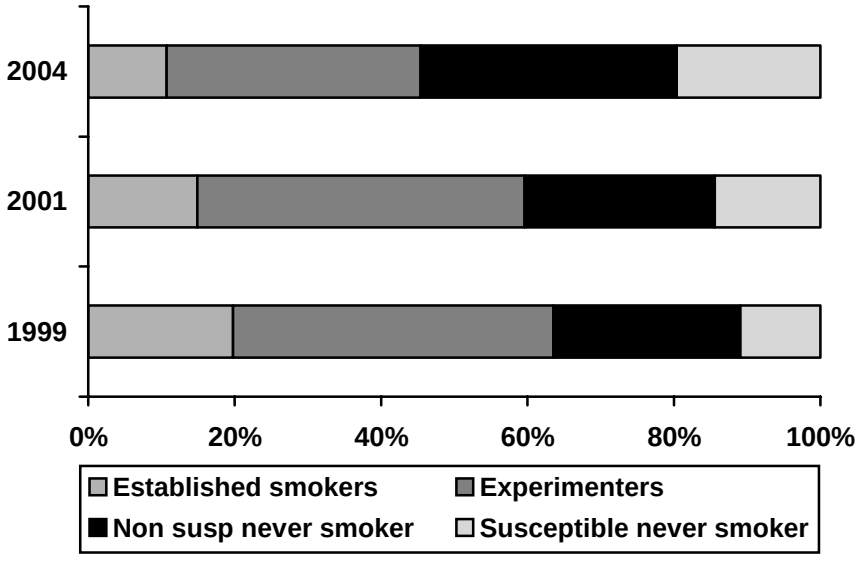
Since 1999, there have been significant decreases in cigarette smoking for both middle and high school students across all demographic groups. Furthermore, the number of high school students considered to be established smokers has declined and a greater proportion of young people are having their first cigarette later in high school, indicating a delay in smoking initiation. There has also been a decrease in the proportion of adolescents who think that smoking is cool and in the proportion of adolescents who think that smokers have more friends.

Attitudes toward tobacco and tobacco companies are changing. The number of middle school students indicating they would wear or use tobacco company products has decreased, as has the number of high school students who think tobacco companies try to get teens to smoke. In addition, adolescents indicated that they were aware of and receptive to anti-tobacco messages in the media. Therefore, anti-tobacco media messages should be increased in order to reach this age group.

There have been decreases in the number of adolescents who have attempted to buy tobacco, as well as in the number of adolescents who have successfully purchased tobacco. The number of adolescents who were asked to show proof of age when buying cigarettes has risen since 1999. However, this decrease in cigarette purchases is coupled with an increase in adolescents getting cigarettes from social sources.

While smoking has decreased among adolescents, the number of adolescents susceptible to smoking (those indicating they would try a cigarette soon, within the next year, or as offered by a friend) has increased (see Figure 8.1). It is possible that these susceptible smokers will begin smoking in the next few years, increasing the prevalence of adolescent smoking. It is also

Figure 8.1: Percentage of high school students who are susceptible to smoking – NJYTS, 1999-2004



possible that susceptibility does not directly lead to adolescent smoking, or that there are factors that mediate this relationship. Increased efforts to decrease smoking susceptibility are warranted at this time.

There are other indicators that need improvement as well. The number of adolescents who report getting cigarettes from a social source (either "bumming" them or giving money to someone else to purchase them) has increased. In addition, young peoples' use of tobacco products other than cigarettes remains a significant public health concern.

School-based interventions and policies are having the intended effects, but are increasing in magnitude too slowly. Most schools do have policies prohibiting smoking for students, staff, and visitors. However, a 100% tobacco-free policy is defined as a policy that prohibits the use of *all tobacco* products *by everyone* (i.e., students, faculty and visitors), *in all locations* (i.e., indoors, on school grounds, in school vehicles, and at school sponsored events), 24 hours a day. Less than half of the high schools (47.3%) were categorized as having a 100% tobacco-free policy. Comprehensive tobacco-free policies are a necessary step to establishing strong anti-tobacco norms in schools.

REBEL is New Jersey's statewide anti-tobacco movement, yet fewer than half of New Jersey high school students were aware of the REBEL program. There was no significant difference in the level of students' awareness of REBEL between 2001 and 2004, a time period where we expect to see growth in this area. However, most students expressed interest in participating in REBEL when it was described, suggesting that expansion of the program would be welcomed by students. Ads for REBEL were shown on Channel One and while 55% of students with access to Channel One reported seeing the ads, only 10% of the total student sample remembered seeing the REBEL ads. Therefore, Channel One may not be the most effective media channel for reaching the majority of New Jersey students; although cost of placement may be low compared to television advertising, the benefit may also be lower.

On the level of policy, there is room for progress, though there have also been some victories. The high excise tax that New Jersey imposes on cigarettes may be at least partially responsible for the decline in adolescents' buying of cigarettes. Few municipalities are taking appropriate steps to restrict youth access to tobacco products – the majority of municipalities do not restrict retail or outdoor tobacco advertising, do not restrict or ban tobacco vending machines, and do not restrict self-service tobacco sales.

The strongest indicators to assess the influence of the tobacco industry are those that monitor actual tobacco industry activities such as the extent and type of tobacco industry advertising and promotion. Indeed, tobacco industry advertising and promotions play an important role in promoting smoking initiation and increased consumption. Existing CTCP data systems do not capture information on tobacco industry activities in New Jersey. These data would allow for evaluation of several important indicators of the State's progress in reducing the influence of the tobacco industry, particularly the presence and placement of tobacco promotions in retail outlets throughout New Jersey. A system of monitoring and recording retail tobacco advertising and promotions both inside and outside of stores should be developed and maintained.

School policies may result in decreased susceptibility to smoking and delayed smoking initiation, and more schools should be encouraged to adopt 100% tobacco-free policies. While many schools have policies banning student and staff use of cigarettes, fewer schools ban use of any tobacco, by visitors, or in all venues. A comprehensive ban of tobacco products is needed in all schools.

Finally, it is necessary to address noncommercial sources of tobacco products. Forster and colleagues (2003) suggest that social exchange of cigarettes is linked to community policies and norms, as those adolescents who buy cigarettes are also more likely to participate in social exchange, while adolescents who believe their communities disapprove of smoking are less likely to participate in social exchange. Therefore, clear messages from the community (in terms of 100% tobacco-free policies and restrictions on access to tobacco products for minors) should reduce noncommercial exchange of tobacco products as well.

Eliminating Nonsmokers' Exposure to Secondhand Smoke

The level of support for smoking bans in restaurants, bars, and workplaces is higher than ever before. This bodes well for efforts to institute such bans by referendum in New Jersey. However, there has been no increase in the proportion of the population who think secondhand smoke is harmful. The proportion of adults who think that secondhand smoke is harmful has remained very high (93.4%), perhaps indicating a ceiling effect for this statistic.

While three-quarters of adults have workplaces with smoke-free policies, there are still disparities among workers exposed to secondhand smoke on the job. For example, Hispanics are more likely to be exposed to secondhand smoke in the workplace than are other ethnic groups, males are more likely to be exposed than are females, and young adults are more likely to be exposed than are older adults. There has been little change in the proportion of adults working under smoke-free policies since 2001.

Smoke-free policies make a difference only when policies are actively enforced and there is high level of compliance. If a statewide clean indoor air law is passed in New Jersey, policy enforcement will be critical for effective compliance.[7] Currently, New Jersey data on tobacco policy enforcement do not exist or are not readily accessible. Thus, it is recommended that the CTCP initiate a mechanism to monitor such enforcement activities.

There has been good progress made in increasing the number of smoke-free homes in the State. Fewer adults, including smokers, are smoking or allowing others to smoke in their homes or in parts of their homes, which is reducing exposure to secondhand smoke in the home. Indeed, fewer youth are reporting exposure to secondhand smoke indoors. There is little noncompliance with these voluntary tobacco restrictive policies in the home.

It is recommended that New Jersey make clean indoor air a priority. This would entail the enactment of more smoke-free policies for the workplace and for restaurants and bars. In addition, enforcement of existing and new policies must be maintained and data on enforcement

[7] Clean indoor air legislation was pending at the time this report was written. The New Jersey Smoke-Free Air Act has since passed, signed by Governor Codey in January 2006.

recorded. CDC recommends three indicators specific to the enforcement of smoke-free public policies: the number of compliance checks conducted by enforcement agencies, number of responses to complaints, and the number of warnings, citations and fines for infractions of policies. Currently, no data exists on indicators related to enforcement of policies; these data are needed to measure and promote the efficacy of existing policies.

Further, the CDC lists five indicators specific to compliance with tobacco-free policies: perceived compliance with tobacco-free policies in workplaces, perceived compliance with policies in public places, the proportion of public places observed to be in compliance with policies, perceived compliance with tobacco-free homes and vehicles, and perceived compliance with policies in schools. Data is available on perceived compliance with policies in workplaces, homes, and schools, but there is no data on compliance to policies related to public places because there are no policies preventing smoking in public places. The development, ratification, and enforcement of policies related to the restriction of smoking in public places is an important step toward eliminating nonsmokers' exposure to secondhand smoke.

Promoting Quitting among Adults and Youth

While the data reported here signify that New Jersey residents have been exposed to the CTCP media messages about cessation services, the existing literature on other tobacco control media campaigns document awareness among the target audience at much higher levels (60% and higher - Sly, Heald, and Ray, 2001; Thrasher, et. al, 2004) than those reported in New Jersey. The "Don't quit alone" campaign has yet to reach saturation and therefore its true potential has not yet been realized. However, the ad released by CTCP in 2004 did resonate with the audience: over one-third of New Jersey residents indicated they had seen the "Bedroom Invasion" television spot, and almost 20% were able to describe the contents correctly. Doctor's office brochures also were an effective source of information, as they were the most cited source of information about Quitline in 2004 and remain the second most cited source overall.

The reason for the higher recognition of Quitline over Quitnet is not entirely clear. However, one possibility is that awareness is not New Jersey specific. Indeed, the adult population in New Jersey is exposed to media messages in promotion of New York's Quitline as well as national Quitline initiatives. It is however, interesting to note that while overall awareness of New Jersey Quitline is higher, utilization of New Jersey Quitnet exceeds that of New Jersey Quitline.

Quitline and Quitnet have both experienced a decline in use over time, even though awareness of these services has increased among smokers (though not among nonsmokers). Since almost three-quarters of smokers indicate that they wish to quit smoking, the decline in Quitline and Quitnet seems to be the result of a lack of exposure to Quit services rather than a lack of interest in the services. As a group, New Jersey smokers seem primed to use cessation services. Both quit attempts and successful quits (abstinence from smoking) have increased since previous surveys. The majority of smokers have attempted to quit at least once in the past, and as they are still smoking one can only assume that most of these attempts were unsuccessful. Of those adults and adolescents who did attempt to quit smoking, fewer than 20% of adults and fewer than 10% of adolescents used something to help them quit. Quit attempts are more successful when

cessation services or medication are used (Steinberg, Delnevo, and Hrywna, 2002). New Jersey smokers must be made aware of and encouraged to use available cessation services.

The gap between wishing to quit and taking the step to quit and utilizing cessation services must be examined and narrowed. Physicians can play a role in reducing this gap through the 5 A's, in particular, by assisting smokers in quitting through setting quit dates and with medication, and by arranging for follow-up treatment. Currently only about 30% of health care providers are assisting in quit attempts and fewer than 10% are arranging for follow-up treatment. There has been an increase in the number of smokers who said that their health provider had referred them to Quitline, but this number was still low (11.5%), indicating that providers must be made aware of the Quitline resource and prompted to refer their smoking patients to the service.

In order to increase the promotion of tobacco cessation among adults and youth, it is recommended that media that encourages quitting and provides information about cessation resources be increased. Existing media, including television and radio ads and doctor's office brochures, have been effective but awareness of these resources is low and saturation has not been met. The messages expressed must be consistent in order to lead to an increased proportion of people exposed to quit messages and cessation resources.

9. GLOSSARY

Abbreviations, Acronyms and Definitions

ALA: The American Lung Association is a non-profit nationwide organization which fights lung disease in all its forms, with special emphasis on asthma, tobacco control and environmental health.

ATS: The Adult Tobacco Survey is a population-based survey designed to examine the tobacco behavior, knowledge, and attitudes of adults.

Bidis: Small, brown, hand-rolled cigarettes primarily made in India and other Southeast Asian countries. Often flavored.

BRFSS: Behavioral Risk Factor Surveillance System is an ongoing nationwide surveillance system supported by the CDC and conducted in all 50 states.

Campaign for Tobacco Free Kids: The Campaign for Tobacco Free Kids is a non-governmental initiative to protect children from tobacco addiction and exposure to secondhand smoke.

CAT: Communities Against Tobacco is a network of local coalitions in each New Jersey county. These coalitions are joined together with a common mission to change or establish community norms, attitudes, and behaviors around tobacco use.

CDC: Centers for Disease Control and Prevention is an agency of the U.S. Department of Health and Human Services.

Compliance checks: Compliance checks are unannounced investigations done at local retailer establishments to identify underage sale of tobacco.

Consumption: A calculated indicator based on the reported number of days on which smoking occurred multiplied by the mean number of cigarettes smoked daily.

CTCP: The Comprehensive Tobacco Control Program is a program of the New Jersey Department of Health and Senior Services. Its mission is to decrease deaths, sickness and disability among New Jersey residents who use tobacco or are exposed to ETS.

DHSS: Department of Health and Senior Services, State of New Jersey.

Federal Synar Agreement: The Synar Amendment, named for the late Congressman Michael Synar, is a federal law that requires states to restrict and reduce youth access to tobacco products or risk loss of block grant funding for alcohol and drug programs.

Fresh Start for Teens: Fresh Start for Teens is a tobacco cessation program designed to assist in educating middle school and high school aged teens in making healthful and permanent choices regarding tobacco use.

High School Students: Comprised of students who were in 9th, 10th, 11th, or 12th grade at the time of the survey.

Secondhand Smoke: A mixture of the smoke given off by the burning end of a cigarette, pipe, or cigar and the smoke exhaled from the lungs of smokers.

Indicator: Indicators describe what information can be collected and analyzed to assess the status of a program.

Kreteks: Cigarettes which combine shredded clove buds and tobacco, primarily manufactured in Indonesia.

Logic Model: A logic model is a planning tool used to clarify and graphically display project intention, accomplishments and impact.

Middle School Students: Comprised of students who were in the 7th or 8th grade at the time of the survey.

MSA: The Master Settlement Agreement was a landmark legal settlement between 46 states and the tobacco industry intended to compensate the state for health costs attributed to tobacco use.

MTF: Monitoring the Future is an ongoing study of the behaviors, attitudes, and values of American secondary school students, college students, and young adults. The study is conducted at the Institute for Social Research at the University of Michigan.

NHIS: The National Health Interview Survey is a cross-sectional household interview survey, administered by the National Center for Health Statistics (NCHS), which is a principal source of information on the health of the U.S. civilian population. NHIS data are used to monitor trends in illness, injury, and disability and to track progress toward achieving national health objectives.

NJ Quitcenters: The New Jersey Quitcenters offer smokers face-to-face counseling in a clinic setting. The 5 Quitcenters offer individual and group therapy as well as reduced-cost nicotine replacement therapy.

NJ Quitline: The New Jersey Quitline (1-866-NJSTOPS) is a toll-free telephone based service for smokers that offers one-on-one counseling in 26 languages.

NJ Quitnet: The New Jersey Quitnet (www.njquitnet.org) is a free online resource for smokers. The website offers peer support groups and trained counselors, 24 hours a day, as well as a quitting calendar, quitting tools and strategies, and a directory of local treatment options.

NJATS: The New Jersey Adult Tobacco Survey is a population-based survey designed to examine the tobacco behavior, knowledge, and attitudes of New Jersey adults.

NJDHSS: The New Jersey Department of Health and Senior Services.

NJHCPS: The New Jersey Health Care Provider Study (NJHCPS) is a survey designed to obtain data on health care providers' practices for tobacco dependence treatment for populations including adults, adolescents and pregnant women.

NJGASP: The New Jersey Group Against Smoking Pollution works to secure smoke-free air for nonsmokers and ensure tobacco-free lives for children by helping to create local policy and legislation.

NJMTS: The New Jersey Media Tracking Survey is a point-in-time telephone survey used to explore New Jersey adults' awareness of state anti-tobacco advertising and media campaigns.

NJAMTS: The New Jersey Adolescent Media Tracking Survey is a telephone survey of New Jersey 12-17 year olds used to explore young peoples' awareness of state anti-tobacco advertising and media campaigns, and to explore awareness of and attitudes towards REBEL.

NJSTPS: The New Jersey School Tobacco Policy Survey is a paper and pencil survey designed to examine all aspects of New Jersey high schools' tobacco policy.

NJYRBSS: The New Jersey Youth Risk Behavior Surveillance System is a population-based survey designed to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth in New Jersey.

NJYTS: The New Jersey Youth Tobacco Survey is a component of CDC's Youth Tobacco Surveillance and Evaluation System and monitors tobacco use behavior among middle and high school students. The baseline survey was conducted in 1999 and was repeated in 2001 and 2004.

Not-For-Sale: "Not for Sale" is an advertising campaign intended to support the REBEL movement.

N-O-T: Not on Tobacco is a quitting program designed specifically for teens developed by the American Lung Association, in collaboration with West Virginia University.

NYTS: The National Youth Tobacco Survey is a nationally representative survey providing data on tobacco use among middle school and high school students.

PHS: The Public Health Service guideline summarizes the strategies for providing appropriate tobacco cessation treatments for every patient.

PPS: Probability Proportional to Size is a sampling technique, commonly used in multi-stage cluster sampling, in which the probability that a particular sampling unit will be selected in the sample is proportional to the population size.

PRAMS: The Pregnancy Risk Assessment Monitoring System is a survey designed to monitor maternal behaviors and feelings during and after their pregnancy. Topics addressed in the survey include smoking, pre-conception health, prenatal care, breastfeeding and partner abuse.

Quit 2 Win: *Quit 2 Win* is a statewide campaign launched by the New Jersey Department of Health and Senior Services (NJDHSS) to mobilize every organization, institution, and individual across the State to get involved in reducing tobacco use.

RDD: Random Digit Dialing is a phone survey method that uses computers to develop random sets of seven digit numbers, including listed and unlisted numbers. This method is the most representative means of sampling a state population.

REBEL: Reaching Everyone By Exposing Lies is an initiative developed by and for teens in New Jersey to combat tobacco industry marketing tactics.

REBEL 2: Reaching Everyone By Exposing Lies 2 is an initiative developed to inform, train, and empower New Jersey middle school students to become effective advocates against tobacco use.

ROCS: REBEL Official College Staff is a group of specially-trained college-age anti-tobacco activists, who provide leadership and mentoring to both REBEL 2 and REBEL.

TASE: Tobacco Age of Sale Enforcement includes merchant education and random unannounced compliance check inspections by NJDHSS staff or local health officers accompanied by underage youth.

UMDNJ: The University of Medicine & Dentistry of New Jersey is the state's university of the health sciences and includes eight schools on five campuses.

9. GLOSSARY

Definitions of key measures

100% Smoke-Free Policy (workplace): Defined as a policy that prohibits smoking in common, public and work areas.

100% Tobacco-Free Policy (school): Defined as a policy that prohibits the use of all tobacco products by everyone (i.e. students, faculty and visitors) , in all locations (i.e. indoors, on school grounds,in school vehicles, and at school sponsored events), 24 hours a day.

Current Use (adult): Defined as having smoked 100 cigarettes in a lifetime and now smoking cigarettes on some or all days.

Current Use (youth): Defined as the use of tobacco on one or more of the 30 days preceding the survey.

Established smokers (youth): Defined as having smoked at least 100 cigarettes in a lifetime.

Ever Use (youth): Defined as the use of a tobacco product over the course of one's lifetime.

Experimenters (youth): Defined as youth who have ever tried a cigarette but have *not* had 100 cigarettes in a lifetime.

Frequent Use (youth): Defined as the use of a tobacco product on 20 or more days of the past 30 days.

Non-susceptible never-smokers (youth): Defined as youth who have never smoked a cigarette and have made a firm decision not to smoke.

Quit attempt (adult): Defined as any quit attempt lasting one day or longer (i.e., successes and failure) in the past 12 months as reported by previous year smokers (i.e., current smokers and recent quitters).

Quit attempt (youth): Defined as any quit attempt lasting one day or longer (i.e., successes and failure) in the past 12 months as reported by current smokers.

Quit success (adult): The proportion of previous year smokers (i.e., current smokers and recent quitters) who quit smoking cigarettes within the 12 months prior to the survey.

Susceptible never-smokers (youth): Defined as youth who have never smoked a cigarette but have not made a firm decision not to smoke.

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APPENDIX 1. DETAILED TABLES

Table 1: Percentage of New Jersey middle school and high school students who were current users of any tobacco product*, cigarettes, cigars, smokeless tobacco, or bidis, by gender, race/ethnicity, and school grade – NJYTS, 2004

	Any	Cigarette	Cigar	SLT	Bidis
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
Middle School					
Gender					
Male	10.1 ± 2.6	3.8 ± 1.7	4.3 ± 1.6	3.6 ±1.3	4.3 ± 1.8
Female	8.7 ± 1.9	4.1 ± 1.9	3.2 ± 1.2	2.6 ±0.8	2.0 ± 0.7
Race/Ethnicity					
White	8.2 ± 2.1	3.6 ± 1.9	3.4 ± 1.7	2.7 ± 0.9	2.3 ± 0.6
Black	9.5 ± 2.9	2.8 ± 1.7	4.3 ± 2.1	2.8 ± 2.1	3.1 ± 1.9
Hispanic	14.5 ± 3.5	7.0 ± 2.6	5.2 ± 2.1	4.5 ± 2.5	6.7 ± 2.7
Grade					
7	6.6 ± 2.2	1.8 ± 1.1	2.2 ± 1.0	3.0 ± 1.3	2.2 ± 1.2
8	12.0 ± 2.6	6.2 ± 2.7	5.3 ± 1.8	3.3 ± 1.3	3.8 ± 1.6
Total (middle school)	9.5 ± 2.0	4.1 ± 1.5	3.8 ± 1.1	3.1 ± 0.7	3.2 ± 1.1
High School					
Gender					
Male	28.9 ± 4.0	15.9 ± 2.9	17.2 ± 2.6	10.1 ± 3.0	7.6 ± 2.0
Female	24.6 ± 3.3	18.8 ± 3.0	10.4 ± 2.6	3.7 ± 1.4	4.7 ± 1.3
Race/Ethnicity					
White	29.5 ± 2.6	20.6 ± 2.4	14.9 ± 2.4	6.7 ± 1.8	5.0 ± 1.2
Black	18.9 ± 6.7	7.7 ± 4.3	10.8 ± 4.9	9.3 ± 4.0	9.9 ± 5.3
Hispanic	28.0 ± 6.3	16.0 ± 5.6	14.6 ± 3.8	6.2 ± 3.4	6.3 ± 2.4
Grade					
9	15.8 ± 3.3	8.7 ± 2.8	8.0 ± 2.1	4.7 ± 2.8	4.7 ± 2.5
10	26.2 ± 6.2	15.9 ± 3.8	13.2 ± 4.3	8.2 ± 3.2	7.8 ± 3.5
11	32.3 ± 5.8	22.0 ± 4.2	15.9 ± 4.7	8.8 ± 3.8	6.3 ± 2.8
12	35.2 ± 5.4	24.2 ± 4.1	19.2 ± 3.9	6.7 ± 2.7	5.7 ± 2.4
Total (high school)	26.8 ± 3.0	17.3 ± 2.3	13.8 ± 2.3	7.0 ± 1.8	6.1 ± 1.4

*Use of cigarettes, cigars, smokeless tobacco, or bidis during ≥1 of the 30 days preceding the survey

Table 2: Percentage of New Jersey adults who were current users of cigarettes, by gender, race/ethnicity, and age – NJATS, 2005

	2000	2001	2002	2005
	% (95%CI)	% (95%CI)	% (95%CI)	% (95%CI)
Gender				
Male	21.9 ± 2.4	25.8 ± 2.3	20.8 ± 2.7	19.8 ± 3.1
Female	18.0 ± 1.7	18.8 ± 1.7	15.6 ± 1.7	15.4 ± 2.1
Race/Ethnicity				
White	20.3 ± 1.7	23.6 ± 1.7	18.4 ± 1.9	18.3 ± 2.1
Black	19.6 ± 4.4	20.7 ± 4.1	16.5 ± 3.7	22.0 ± 7.3
Hispanic	17.3 ± 4.2	17.2 ± 3.8	20.0 ± 5.3	13.6 ± 4.4
Age Group				
18-24	27.5 ± 3.5	27.2 ± 3.2	22.7 ± 4.4	22.7 ± 5.0
25-44	25.5 ± 2.7	24.2 ± 2.4	20.3 ± 2.6	20.5 ± 3.7
45-64	15.9 ± 2.4	22.3 ± 2.8	19.4 ± 3.0	17.8 ± 3.0
65+	7.7 ± 2.0	13.5 ± 2.7	9.1 ± 2.5	8.4 ± 2.4
Total	19.8 ± 1.5	22.1 ± 1.4	18.0 ± 1.5	17.4 ± 1.8

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